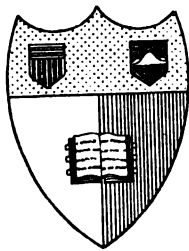


EB401
A51
V.16-19
1922-23

Volume Complete
2nd Edition



New York
State College of Agriculture
At Cornell University
Ithaca, N. Y.

Library



Digitized by MED: May 1993

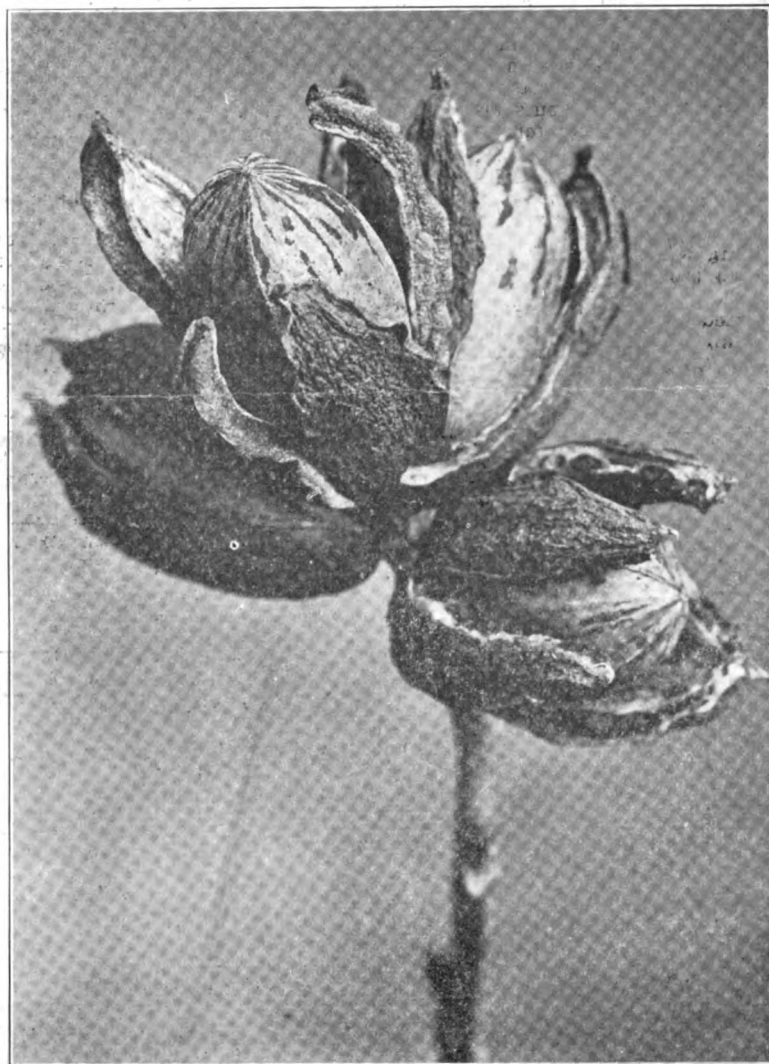
American Nut Journal

**DEVOTED TO NUT GROWING INTERESTS
GENERALLY THROUGHOUT THE AMERICAS**

Vol. XVI, No. 1

JANUARY, 1922

Per Copy 20c.



CLUSTER OF BUSSERON (INDIANA) PECANS

**On J. F. Wilkinson's Rockport, Ind., Tree Transplanted
Eight Years Ago, Which Bore 125 Nuts
Fall of 1921. Photo Actual Size.**

39 STATE ST.



ROCHESTER, N. Y.

American Fruits Publishing Co.

The English Walnut Industry in California

By Arthur L. Dahl, in Williamsport, Pa., Grit

THE English walnut did not originally come from England, as might be supposed, for it is a native of Persia, but it is known by that name throughout the world because the British Nurserymen realized the market value of this clean, smooth nut, and developed the industry at home and in many of their colonies. In California, however, the nut has been developed to its greatest extent, not only from the standpoint of acreage under cultivation but from the standpoint of quality. By grafting superior varieties of trees on older tree trunks, and by cultural methods, the California walnuts have been developed into unusual sizes and unsurpassed quality.

In the early days of the walnut industry in California it was thought that the trees would only thrive along the coast, where the ocean breezes keep down the high temperatures of the summer, and also provided a more equable temperature in winter. Gradually, however, the nut orchards have invaded the interior valleys until today one can pass through miles of these trees in various parts of the Golden State. In most cases the thin-shelled English walnut sprouts are grafted on to the roots of older black walnut trees, thus providing a vigorous parent stock for the fruit.

Walnut trees develop in time into large trees and ordinarily have a long life. They thrive best in places where an abundance of light and air is provided and accordingly the trees are not planted as close together as is done with fruit trees. Budded walnut trees start bearing at five or six years of age and from then on to the tenth year the annual crops grow heavier. When properly managed, walnut trees will produce heavy crops for more than 100 years, for there are some trees in California more than 150 years old that are still bearing heavily. It is not an uncommon thing for an orchard of English walnut trees to produce \$300 worth of nuts in a season.

More than 65,000 acres are planted to walnut trees in California, representing an investment of \$60,000,000. An average crop of English walnuts is about 40,000,000 pounds, and these sell for \$10,000,000. Irrigation is practised on virtually all of the orchards, since California has but two seasons, the "wet" or winter, and the "dry" or summer. This application of water enables the growers to regulate the growth of the trees and a crop failure is almost unknown.

During the harvest season, which occurs in the late summer, most of the nuts drop from the trees and are gathered up and sacked. Those which remain on the trees are shaken from the limbs by long poles with hooks on the end, which enables the worker to vigorously shake the branches until all of the nuts fall off. In the descent most of the husks are broken open and the nuts fall out, and those which are still enclosed are husked in the field and only the clean nuts sacked.

After picking and sacking the nuts are hauled to the drying field, where they are spread out on wooden trays for several days to permit the warm sun to dry them out thoroughly.

The bulk of the walnut crop is packed and sold through the growers' co-operative association. More than 25 local packing associations, each with their own packing house, make up the parent organization, and all grades and packing are standardized. Each neighborhood packing house will handle about 700 tons of nuts in a season.

When properly cured, the nuts are taken

IN THIS ISSUE

NUTS FOR NORTHERN STATES	
By W. G. Bixby.....	1
PROVINCE OF THE TAP ROOT	
By H. A. Halbert.....	5
SOIL FERTILITY	
By J. J. Skinner.....	6
A LESSON FROM NATURE	
A Texas Experience.....	8
NOTES FROM LONG ISLAND	
By W. G. Bixby.....	9
A DOUBLE PURPOSE FOREST	
In Southern New York.....	8
SCORING PECAN NUTS	
By H. A. Halbert.....	10
ON BANKS OF THE WABASH	
By J. F. Wilkinson.....	10
NATIONAL PECAN EXCHANGE	
By Wm. P. Bullard.....	11
MARKET AND CROP REPORTS	
North, South, East, West.....	12

to the packing house and are run over a rough screen which frees them from dirt and foreign substances. They then pass through a suction machine, which lifts out the blank or imperfect nuts, while the good nuts pass on to the next step, which consists of moving along slowly on a traveling belt alongside of which are seated a number of women who inspect the nuts and pick out any that does not measure up to the standard.

The nuts are then bleached by being immersed for a minute or two in a vat containing a bleaching liquid. From this vat the nuts are automatically carried over another shaker which frees them from the accumulated drops of the bleaching solution.

They next are elevated to another department where the grading is done. The nuts are conveyed to revolving cylindrical drums 10 feet long and 40 inches in diameter, set on a six-inch pitch. Each drum can grade one and one-half tons of walnuts in an hour, and the sides are perforated with 8,000 holes a trifle more than one inch square. Any nuts that pass through the cylinder without falling through these openings are known as No. 1 grade, while those that go through are No. 2 grade.

The nuts from the grader are again carried along moving belts between two lines of girls, who pick out such nuts as have been broken in the process, or are improperly bleached, and the remainder are then ready for sacking.

All nuts that do not pass inspection as being suitable for sending to market as fresh nuts, are sent to the cull department, where machines are available to break them up and extract the meats, which are packed in airtight cans or cartons and are sold to confectioners and candy makers.

Ignace Paderewski, former premier of Poland, has abandoned his plan of selling his almond grove at Paso Robles, Cal., and returning to the concert stage. He says he could not get what he considered the proper price for the grove. "I have almost lost touch with the musical world," he declared. It is more than two years since I attended a recital. Later on, I may give some time to writing new scores for the piano."

The "American Nut Journal" is the only national publication devoted to Nut Culture in all its phases. It circulates throughout this country and abroad.

LITERATURE

In the New York Times of January 1st was published a review of Dr. Robert T. Morris' book on Nut Growing, by Dr. William C. Deming, secretary Northern Nut Growers Association, who says:

Dr. Morris aims to show that nuts in their present improved forms, and on grafted trees, should be planted as freely as apple and peach trees; that these grafted trees will bear as early as apple trees; that great nut industries can be developed in almost all parts of this country; and that such industries must be developed to insure the country's future food supply with one of nature's most nutritious foods.

It is safe to say that there is no other person in this country with Dr. Morris' breadth of scientific and practical knowledge of nut culture wherewith to demonstrate its possibilities for profit and pleasure. The book is the work of a lover of man, of nature, of trees, and of nut trees in particular. He writes in crisp sentences as nutty in flavor as his beloved kernels themselves. Those who are weary of the narcotism of fiction should take the tonic of facts in the Morris vehicle of wit and humanitarianism.

He writes for every man or woman who has land enough for a tree. * * * Few persons realize how highly nutritious nuts are. An acre of land devoted to nut growing may produce more than ten times as much protein as the same acre devoted to pasturage of beef cattle. "The average value of the six principal flesh foods is one-fourth that of a pound of nuts." It is surely something for us to take thought about, if nut meats are four times as nutritious as flesh meats. "Each nut represents a prize package of the most concentrated food." Each acre of walnut trees in bearing will produce every year food approximating 2,500 pounds of beef. Although with nuts as food meat is unnecessary since they furnish all the essential proteins and vitamins, yet nut growers do not ask the giving up of lamb chops and juicy beefsteaks. Nuts, however, have the advantage over flesh foods in that they are free from "uric acid" and disease germs, that they keep indefinitely without refrigeration and that they do not easily decay.

Buyers of nut trees must make careful inquiry before investing, as many misleading statements have been made by advertising nurserymen and much harm has since been done thereby to the new agriculture.

Roper Offers Pecan Trees To City

William N Roper has made an offer to the city of Petersburg that he will give to the municipality any number of pecan trees up to 400 or 500 to be placed in various parks and along streets, if the city will plant them, says the Petersburg, Va., Progress.

City Manager Brownlow said in response that the offer of Mr. Roper would be taken up, and that he hopes that in the near future a large number of these trees will be planted in various parts of the city, particularly in the parks. Mr. Brownlow said that he doubted if any of the trees would be planted along the streets, but that a large number of them would be placed in Central and West End parks. Such trees as will be used will come from Mr. Roper's nursery in Chesterfield county, and will be delivered to any place in the city that they are wanted, all that is remaining to do is to actually place the trees in the parks.

CONSULTING TROPICAL HORTICULTURIST and TREE EXPERT

HARVEY C. STILES

COLUMBIA, TEXAS

Specializing in Pecans, Grapefruit, Avocados, and Landscape Development. Long experienced expert for—and present active director of—many such large projects throughout tropics and semi-tropics. Examinations, Reports, Plans, Specifications and Estimates. Correspondence suggested.

An Ideal Investment

UNITED STATES
TREASURY SAVINGS CERTIFICATES

\$25 denomination for \$20
\$100 denomination for \$80
\$1,000 denomination for \$800

On sale at
POST OFFICES and BANKS

AMERICAN NUT JOURNAL --- JANUARY, 1922

EDITORIAL DEPARTMENT—Communications on any subject connected with Nut Growing and Distribution are cordially invited by the editor; also articles on this subject. We shall be pleased to reproduce photographs of trees of interest, methods and accens connected with the Nut Industry; portraits of individuals, etc. Suggestions are cordially welcomed.

ADVERTISING—Advertising forms close on the 10th of each month. If proofs are wanted, copy should be in hand on the 1st. Advertising rate: 20 cents per agate line; \$2.90 per column inch for any amount of space.

Advertisements that do not represent reliable concerns will not be accepted.

SUBSCRIPTIONS—The "American Nut Journal" will be sent to any address in the United States for \$2.00 a year; to Canada or abroad for \$2.50 a year. Three years: In United States, \$5.00; Canada, \$6.50.

Add ten cents for exchange unless bank draft, express or postal money order is used.

WHAT THIS JOURNAL STANDS FOR—Reliable information on all phases of the Nut Industry. It is for the advancement of Nut Growing in general; it is in no way confined to the interest of a particular kind of nuts, nor of a particular section. It is broad in scope and absolutely independent. The aim of "The American Nut Journal" is to stimulate thousands of persons into developing interest in one of the greatest food supplies of the future—to line the roadsides and fill the waste places with trees of a sort which yield dollars worth of fruit every year instead of the mere bunches of leaves resulting from present shade and ornamental planting. At the same time it will record the progress of the industry, the latest descriptions in the note book of the biologist and plant physiologist, the rapidly expanding knowledge of methods, the increasing acreage, and in short the news as it develops of an industry whose importance is recognized by an increasing number of persons in all sections.

Entered as second-class mail matter June 6, 1914, at the post office at Rochester, N. Y., under the Act of March 3, 1879.

AMERICAN FRUITS PUBLISHING COMPANY, Inc.

Ralph T. Olcott, Editor and Manager

121-123-125 Ellwanger & Barry Bldg., Rochester, N. Y.

Classified Business Announcements In This Issue.

New Walnut Grafting..... C. R. Biederman.....	13	Lancaster Nut Nurseries....Northern Nut Trees.....	14
Bassett, W. W.Pecan Trees	16	"Nut Growing" New Book	14
Bechtel's Pecan Nurseries... Grafted Pecan Trees.....	16	Nut InformationSpecial Topics	2
Carol Plantation Nurseries.. Grafted Pecan Trees.....	16	Nuts as Staple Food..... Dr. J. H. Kellogg.....	2
Eaton Nut Machine Co..... Nut Crackers	16	Simpson Nursery Co..... Pecan Budwood and Trees.....	16
Florida Nurseries Pecan Trees	16	Stiles, Harvey C..... Tree Expert	15
Indiana Nut Nursery..... Northern Pecan Trees.....	16	Stone, B. W.Pecan Trees, Nuts, Groves.....	14
Inspections, Consultations ...Dr. W. C. Deming.....	16	Texas Pecan NurseryBudded Pecan Trees.....	11
Jones, J. F.Grafted Nut Trees.....	14	Wilkinson, J. F.Grafted Pecan Trees.....	16
		Woodson, Robert E..... Pecan Shelling Machine.....	3

IMPORTS OF NUTS INTO THE UNITED STATES, FOR CONSUMPTION, DURING THE LAST THIRTEEN YEARS

(Compiled by Bureau of Commerce and Navigation, Department of Commerce, Especially for the "American Nut Journal.")

KIND	1907	1908	1909	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919
Almonds—not shelled.....lbs.	5,714,207	8,515,688	2,120,632	6,810,056	3,762,654	5,242,563	2,363,860	5,501,059	4,684,598	2,368,369	4,901,168	6,149,374	7,482,538
Shelled.....lbs.	8,717,952	8,556,162	8,538,054	10,495,750	12,160,636	11,682,988	12,655,057	13,896,621	12,168,153	13,210,668	19,160,258	21,544,757	28,007,906
Apricots and peach kernels lbs.				27,854	13,551	7,939	18,769	18,572	67,164	11,926	250,075		
Coconuts in the shell... Dollars	\$1,349,380	\$1,439,589	\$1,246,463	\$1,298,970	\$1,704,262	\$2,012,203	\$1,793,713	\$2,150,500	\$1,593,666	\$1,891,328	\$2,583,560	\$2,490,368	\$4,063,282
Coconut Meat broken or Copra not shredded, dessicated or prepared.....lbs.	7,064,559	14,121,576	23,742,518	20,830,539	38,081,984	61,505,787	54,283,592	44,459,158	88,690,382	108,507,765	247,043,127	430,649,332	258,637,781
Dessicated, shredded, cut or similarly prepared.....lbs.	3,476,698	5,584,652	5,461,602	5,985,308	6,961,850	5,396,465	6,826,095	9,307,924	5,896,806	7,947,380	10,491,796	20,269,909	29,637,674
Cream and Brazil.....bu.	280,633	310,418	409,644	461,496	277,679	21,601,008	11,933,139	11,431,531	12,489,217	12,489,217	16,242,302	11,282,088	43,076,368
Filberts—not shelled.....lbs.	9,960,280	8,997,246	7,365,837	10,026,961	10,084,987	8,375,890	8,586,278	10,366,072	10,922,248	10,003,552	16,468,547	7,432,524	16,747,349
Shelled.....lbs.	1,553,332	1,343,594	1,384,689	1,413,391	2,332,606	1,368,835	1,450,620	1,798,147	1,722,705	1,259,540	2,280,787	4,245,863	3,778,906
Marrons, crude.....lbs.				10,270,388	9,968,879	14,845,345	10,157,321	18,849,257	12,549,939	15,754,796	6,275,030		5,021,146
Olive nuts, ground.....Dollars	\$1,016	\$1,027	\$580	\$178	\$236	\$206	\$312	\$385	\$25	\$112	\$120		
Palm and Palm Nut Kernels	\$3,350	\$2,250	\$2,752	\$6,907	\$5,744	\$7,970	\$4,872	23,127	31,900	1,104,885	626,435	16,905,313	5,610,056
Peanuts or Ground Beans.....													
Unshelled.....lbs.	10,432,828	6,498,202	7,326,371	11,297,172	11,055,823	12,680,433	12,140,612	17,298,778	14,075,387	9,623,411	7,710,082	1,970,797	5,667,354
Shelled.....lbs.	4,780,054	1,775,946	1,302,919	16,089,919	7,821,505	3,127,829	7,823,173	21,819,101	11,645,507	19,739,888	27,548,928	67,746,831	24,179,687
Pecans.....lbs.		1,118,071	1,480,289	3,349,460	2,333,037	2,607,227	1,803,434	2,621,161	2,032,539	1,265,382	4,076,933		
Walnuts—not shelled.....lbs.	23,036,646	21,427,853	17,432,885	23,269,974	21,146,116	22,208,845	16,363,016	16,134,211	20,985,326	22,610,418	17,177,992	3,304,003	21,235,078
Shelled.....lbs.	7,199,988	7,098,958	8,781,908	10,960,988	11,244,054	10,713,286	10,093,622	11,636,053	10,532,956	13,445,790	12,257,593	9,707,401	10,260,899
All other shelled or unshelled, not specially listed.....lbs.	10,598,186	10,441,327	9,938,337	3,584,544	2,962,663	3,050,980	3,600,056	7,426,313	3,272,492	2,772,589	2,769,634		
Total of nuts imported Dollars	\$9,315,891	\$9,563,742	\$8,549,997	\$12,775,196	\$14,265,572	\$15,626,485	\$13,508,307	\$19,815,713	\$16,865,244	\$20,594,434	\$33,697,688	\$49,930,283	\$74,499,04

a—pounds.

THE WOODSON PECAN SHELLING MACHINE

IS STILL IN THE LEAD

Built and runs like a "Packard", and is in use by over 90 per cent of the Commercial Pecan Shellers in the United States.

Also manufacturer of the Woodson Automatic Pecan Grading Machine.

There is a reason why 90% of the Commercial Pecan Shellers of the United States use the WOODSON machine.

Write for catalog to

ROBERT E. WOODSON,

INVENTOR and
MANUFACTURER

P. O. Box 1362

ST. LOUIS MO.

Nurserymen Should Know

That one of the fastest growing industries in the country is

NUT CULTURE

Demand for information as to Nursery-grown Nut Trees is insistent on all sides. Full information by specialists appears regularly in

AMERICAN NUT JOURNAL

Leading National Publication of the kind

Subscription \$2.00 Per Year

Advertising Rate \$2.90 per inch

AMERICAN FRUITS PUBLISHING CO., Inc.

39 State St., ROCHESTER, N. Y.

WHAT NUT TREES MAY BE PLANTED IN THE NORTHERN UNITED STATES

The American Nut Journal on December 19, 1921, asked if I would prepare a paper on this subject for the January issue of the Journal and with its request sent a letter from Dr. W. A. Thomas, Lincoln, Nebraska, Route No. 2. Dr. Thomas is evidently desirous of getting direct positive statements as to what can be done in his section of southeastern Nebraska. It is not so very long that I have been in possession of facts that give me confidence to speak at all positively as to southeastern Nebraska and there are many other facts still needed but what we have are of material help. These are U. S. Weather Bureau records of all stations in the United States for nearly ten years and letters from Dr. Thomas in which he gives observations not only as to the nut trees native around Lincoln but those not native which have been planted and which do well.

I will give first, direct statements as to what I feel can be done at Lincoln and then in more general terms tell how these would change in sections away from southeastern Nebraska. If I can get from other sections information as definite as to what nut trees are native and those that have been planted and are growing well, I could give equally definite statements as to those places.

NUT TREES FOR SOUTHEASTERN NEBRASKA

Pecan—While the pecan is not native at Lincoln some trees have been planted and have been growing there for many years. The weather bureau records leave little doubt that the climate is favorable for the northern pecan. Seemingly most all if not all of the northern varieties that are being propagated and which can be supplied by the Nurserymen on the Association's accredited list should grow and bear at Lincoln. The pecan needs a deep rich soil but I think likely that is to be had near Lincoln. The winters at Lincoln are cold and there may be some difficulty in getting the trees safely through the first winter but after that I think there will be little difficulty, for, after the northern pecan has become established it will stand very cold winters. If one or two varieties should prove tender or poor bearers they can be top-worked later to other varieties.

Black Walnut—This is native at Lincoln and the fine varieties that have been discovered should grow and bear well. It needs a deep, rich soil like the pecan. It is not a tree that the prospective nut tree planter would ordinarily choose, Persian (English) walnuts being thought of first, but there is a demand for black walnut kernels that is never supplied and the grower will find a ready sale for his product. Black walnut kernels are actually better for certain purposes than English walnut kernels and fine ones frequently bring higher prices.

Chestnuts—The chestnut is not native at Lincoln but many trees are growing in the vicinity. It does not require the deep, rich soil that the pecan and black walnut does, that is it will do well on poorer soil and is found usually on much poorer soil. This should not be taken to mean that it will not do well on rich soil. Small trees are growing and bearing well on heavy loam with

me at Baldwin and it is growing well on the prairies of eastern Iowa. The chestnut would seem to be a species of great promise for planting in southeastern Nebraska. Chestnuts bear young and prolifically and plantings there would in all probability be free from both the chestnut blight and the chestnut weevil, two causes which make chestnut growing in sections where the tree is native almost impossible. What Mr. E. A. Riehl has done on his farm near Alton, Illinois can doubtless be done in many other places. Mr. Riehl has made that part of his farm that was hilly and not well adapted to the growing of ordinary crops the best paying part of it. He planted it to chestnut trees and now has an orchard just coming into bearing. Last year he sold some 4000 pounds at about 35 cents per pound. The varieties Mr. Riehl has are as large as horse chestnuts and of most delicious flavor.

Hickories—Probably all of the fine varieties of hickories that we have will grow and bear at Lincoln. No nut is of better flavor than a good hickory and we have varieties that will doubtless sell at prices equaling those paid for the finest pecans just as soon as they can be produced in commercial quantities. The growing of fine hickories by the time honored process of setting out grafted trees is apparently a pretty slow one, but it can be done. So far as we have records ten years at least must elapse before the nuts can be expected after a grafted transplanted tree is set out. The ability of this tree to use large amounts of plant food may make it possible to reduce this. I have succeeded by liberal feeding in getting young hickories to increase their growth about six inches per year and have one not over six feet high that made nearly 2½ feet last year. How long it will be possible to keep this up, it has not yet been learned but it does not seem unreasonable to believe that special care of the right kind may make the hickory fruit earlier than ten years after setting out.

In addition to the long time that must elapse before a transplanted hickory tree may be expected to bear the prospective planter has all kinds of difficulties in purchasing them. They are expensive to produce and even at \$3.00 or over each they are unprofitable to grow. The small proportions of unsuccessful unions when young trees are grafted with scions from the parent tree is such that the Nurseryman loses money and consequently grows few. They would grow none at all did they not hope to be able later to learn how to get enough successful unions to make growing hickories pay expenses. As it is, the person who wants grafted hickories now usually has to order a year or two ahead. When we consider that the growing of fine hickories in commercial quantities was undertaken in the United States before much was done on pecans, black walnuts or chestnuts and less has been accomplished to date, one cannot help thinking that the hickory is a "hard nut to crack." Much work is now being done on the hickory and the problem of growing fine hickories is being approached from several angles and it

would seem quite likely that notable progress may be made.

A person, however, who has a pasture or other piece of land with young hickories growing on it can get fine hickory nuts much quicker for when young hickory trees three or four inches in diameter are top-worked to fine varieties they frequently bear in three years and have been known to bear in two. In topworking hickories it is important that the proper varieties be used, for all varieties do not do equally well on all species. I understand that the "pignut" hickory is native at Lincoln but as there are at least three different species known in various sections of the northern United States as the pignut and one or two others similarly known in the southern United States more definite information must be had before definite statements can be made as to the varieties to be used in topworking. An inspection of the nuts and of the winter buds will usually enable me to determine the species and frequently the winter buds alone are sufficient.

Other Nuts—Almonds, beechnuts, butternuts, English walnuts, hazels, Japan walnuts.

It would seem likely that the hazel or filbert would grow at Lincoln and that the hazel is native near there although I have no positive information to that effect. Like the chestnut the hazel will grow well on poorer ground than the pecan and black walnut. At Baldwin, hazels seem to fruit better on light soils rather than on heavy loam. As the hazels are so shallow rooted they may need especial attention to see that they live through the first summer.

It would seem likely that the butternut would grow and fruit at Lincoln. It may be native near there although I have no positive information on the subject. It is not as deep rooted as the black walnut and is almost always found native near water courses.

It would seem likely that Japan walnut would grow and fruit at Lincoln. In its native country it is found over a north and south range of about 600 miles over just about the same range as the butternut in the United States. It grows well in the northern United States where the butternut does not. The provinces of Japan where it is cultivated have a moderate climate and some of the fine varieties we have are tender in cold climates. It is well worth a trial in every section.

The beechnut would probably grow at Lincoln and may be native near there. Unfortunately, we have as yet no varieties of merit.

The hard shell almond, the Ridenhauer, seems to be hardy wherever the peach is. The nuts it bears look like peach kernels. They are well flavored, however.

The English walnut is a tree about which we get so many contradictory reports that one hesitates about recommending it. It has been known to suffer winter injury in California where frost is almost unknown and it has been known to go through severe winters without injury in sections where apple trees have suffered from serious injury and some have been killed outright. English walnut trees generally do not do

A Timely Inquiry

Editor American Nut Journal:

I have been a subscriber to the *American Nut Journal* for four years. In the 48 months I do not think there is an article stating what nut trees should be planted in the northern states. I wish to plant hundreds of nut trees. Let us have information as to what trees can be grown in the different sections of the northern states. As a rule in this section they must stand the rigors of winter with a temperature repeatedly 20 degrees below zero.

Prof. Chittenden states "plant the species that belong to that locality." That advice is not good; for, if taken, we would not progress. This is a rich prairie state. We have black walnut, pig-nut, hickory and two oaks that are indigenous. A large number of pig-nut hickory trees near here, 50 to 60 feet high, are dead. The professor of botany in our state university does not know the cause of their demise.

I am interested in trees that grow in New England, New York and Pennsylvania. I feel that the trees that succeed well in those states should be tried here. Let us have information on what trees will grow in the north and where we can purchase them.

The discussion that has been going on for some time in the *Journal* in regard to seedling and grafted trees is becoming acrid. If

as well in the central United States as they do near large bodies of water which temper both the heat of summer and the cold of winter. Still it is reported as doing well in central Missouri. There is no nut tree where it is necessary for the prospective nut grower to plant trees and get his own experience from the start as with the English walnut.

In planting nut trees, one should not attempt to learn the best variety and plant that exclusively. This is almost certain to bring disappointment. In the first place we do not know enough as to the behavior of northern nut trees when planted in orchard form to be able to state certainly which is the best variety. Furthermore, to get good crops of nuts thorough pollination is necessary and we do not know enough about the flowering habits of the different varieties to state whether a variety is self fertile and may be safely planted alone or not. We do not even know whether two or three varieties planted together will suffice or not. Some chestnut orchards where there are only two or three varieties bear empty burrs rather than nuts. It is not so in Mr. Riehl's orchard where there are many varieties. All nuts there seem to be well filled.

To summarize: In Southeastern Nebraska, plant chestnuts, black walnuts, pecans in as many varieties as it is possible to get. Try out other species.

NUT TREES FOR OTHER SECTIONS

As we go north or south of the latitude of Lincoln, Nebraska there will be some changes in the nuts that can be grown. Apparently the 41st parallel is about as far north as the pecan will bear well and in places of considerable altitude it will not do well as far north. The black walnut, chestnut and hickories and most of the other nuts mentioned excepting the almond, will succeed much further north. As we go south from the 41st parallel the hazel and butternuts will probably be the first to drop out while most of the others will grow well when planted much further south.

WILLARD G. BIXBY.

Baldwin, N. Y., Jan. 6, 1922.

we succeed it appears to me we must plant both; get trees and learn to graft. There are not enough grafted trees to go around. I have been trying for a year to get some Japan walnut nuts to plant and cannot get them.

C. A. Reed states that the Japan walnut is a "dwarfish species." J. J. Kelsey sends out a circular illustrating his Japanese walnut tree stating that it is 14 years old with a spread of 100 feet producing nuts for ten years. I wrote him that no one believed his statement. His reply was that if anyone did not believe it that they could come and look at it. You see he has the Burbank Royal eclipsed in a little over one-half the time.

It appears to me that in the northern states we have a very interesting proposition in the large variety of trees we should plant; viz: almond, hazel, chestnut, the hickory which includes the pecan, black, Persian and Japan walnut.

I suppose we have in the southeastern part of Nebraska as fine a showing of healthy chestnut trees as there is in the United States.

I will say if I can grow nothing but the black walnut I will lose all interest in the nut business and will not need the *Nut Journal* or be a member of the association.

However, I will enclose my check for both for another year.

W. A. THOMAS.

Lincoln, Neb., Dec. 16, 1921.

While there have been numerous articles in the *Journal* touching upon the subject suggested by Dr. Thomas, the editor is constantly on the lookout for additional information. During a single year, 1920, the following articles appeared in the *Journal*.

"Michigan a Nut Growing State," January, 1920.

"To Cut Steaks from Hickory Trees," February, 1920.

"Indiana Nut Culture Urged," March, 1920.

"Suggested Use of the Royal Nut," March, 1920.

"Prof. Gardner an Enthusiast," March, 1920.

"Nut Trees of Michigan," March, 1920.

"Status of the American Nut Industry," March, 1920.

"Nut Trees on the Highways," March, 1920.

"Nut Trees for the Wood Lot," March, 1920.

"Nut Trees for Oregon," April, 1920.

"Best Soil for the Beechnut," April, 1920.

"American Nut Industry as a Whole," May, 1920.

"Nut Trees for Michigan," May, 1920.

"Grafting Walnut on Hickory," May, 1920.

"Black Walnut on Roadsides," June, 1920.

"Advice to Planter by Nut Experts," July, 1920.

"Seasonal Nut Notes at Baldwin, N. Y.," July, 1920.

"Dr. Deming's Black Walnut Advice," July, 1920.

"Black Walnut for Roadsides," July, 1920.

"New York Times on Nut Trees," July, 1920.

"Black Walnut May Be the National Tree," August, 1920.

"Advice to Northern Planter of Nut Trees," August, 1920.

"His Main Crop Filberts," August, 1920.

"Roadside Nut Trees for New York State," Sept., 1920.

"Ancient and Honorable Black Walnut," Sept., 1920.

"The Propagated Hickories," Sept., 1920.

"Shellbark Nuts Plentiful," Sept., 1920.

"Field for Northern Nut Tree Planting," Oct., 1920.

"Hickory Grove Treatment," Oct., 1920.

"A Discussion of Propagated Hickories," Nov., 1920.

"Status of the Black Walnut," Nov., 1920.

"Good Demand for Chestnuts," Nov., 1920.

"Northern Pecan Crop," Nov., 1920.

"Pecans Along the Wabash," Nov., 1920.

"Gathering Walnuts in Iowa," Nov., 1920.

"Washington State Walnuts," Nov., 1920.

"Hickory Nuts \$5 Per Bushel," Nov., 1920.

"Suggestions on Treating a Hickory Grove," Dec., 1920.

"Commercial Growing of the Heart Nut," Dec., 1920.

"Practical Advice to a Kansas Grower," Dec., 1920.

"Plant Nut Trees Now," Dec., 1920.

"Black Walnuts in Pennsylvania," Dec., 1920.

"Filberts in Oregon," Dec., 1920.

"Japan Walnut in Vermont," Dec., 1920.

The Province of the Tap Root

H. A. Halbert, Coleman, Tex.

First. The tap root of the pecan, as well as that of other plants, begins at the surface of the soil or just below it, at the crown of the tree where it is joined to the trunk. The tap root is always the first to emerge when the nut is planted. Most all of the concentrated food of the nut goes first to create the tap root, which descends into the earth, often two or more feet, before the trunk is formed to ascend into the air. The tap root growth is always in advance of the trunk growth and only in proportion as the tap root descends into the earth and finds food and water will the trunk ascend. The tap root will live many years after the trunk is severed and when necessary will grow a top every year to perpetuate life. Millions of acres of cleared land along the streams of Texas, where pecan trees have been hewn down, many years ago, are struggling to grow another trunk in verification of this statement. The trunk will die in a few hours when deprived entirely of the tap root and will never grow another if transplanted. Hence every tree, more or less injured and retarded in growth when part of the tap root is severed in digging it up to be transplanted; so much so that if the nut is planted at the same time and given equal care within a few years will grow the largest and most vigorous trees.

Second. The province of the tap root is primarily to seek food and water in the depths of the earth, to build and sustain all parts of the tree. Secondly it acts as a brace to hold the trunk erect in the air. The tap root is the trunk system of the roots, from which branch all the lateral roots, in every direction, as the tap root descends. These lateral roots are the feeding roots, for the tap root never absorbs water or takes in food, no more than the trunk bears the nuts. The trunk only sends out the limbs that do the bearing. Hence taller the trunk the more limbs will it send out to bear nuts; and likewise deeper the tap root more lateral feeding roots it will send out to sustain the bearing limbs. Therefore, deeper the tap root and taller the trunk more efficient bearer will be the tree.

Third. The importance of the tap root is so clearly shown in discussing the preceding points that very little remains to be said. So important, however, is the tap root that no lateral roots can possibly be grown without some part of the tap root is left to start these lateral roots. After they once get started, it is possible, however, to make them take the place of the severed tap root, just as the severed limb in man will be made up in a measure by the strengthening of the remaining limb. Of course if man could control the elements to bring rain whenever needed, or had water at all times to irrigate, the tap root might be eliminated with small detriment. But as long as Texas weather remains as it is and in event of a drought causing the moisture in the soil, to either evaporate or sink by gravity below these upper lateral roots, then a deeply imbedded tap root reaching water or permanent moisture, is absolutely essential to the very existence as well as longevity of the pecan tree.

Bald Knob, Ark., Dec. 21.—W. F. Martin & Company is providing a ready market for the enormous crop of hickory nuts produced in the bottom country this year. The company is paying \$1 per bushel for the nuts and several parties who have been gathering have been making from \$5 to \$8 per day picking them.

Growing tree crops without tillage on steep lands will prevent the disastrous effects of erosion on such lands under tillage.—Dr. W. C. Deming.

Just mention AMERICAN NUT JOURNAL

Soil Fertility and Fertilizer Problems in Pecan Culture

By J. J. Skinner, Soil-fertility Investigations, Bureau of Plant Industry—
Before National Growers Ass'n., Mobile, Ala., Oct. 1921

UNDER favorable climatic conditions there are three principal methods of controlling the productive capacity of soils. These are (1) cultivation, including drainage and irrigation, (2) rotation of crops, including the growing of leguminous plants and turning under of vegetative matter and (3) fertilizer application. Of these, cultivation and rotation are in the hands of the grower. Fertilizing materials, however, have to be gathered for him from different parts of the world and manipulated to some extent before they are ready to be applied to the land. The character of the material which can profitably be used as fertilizers and the proportion in which the nutrient constituents should be contained in the fertilizer for the best results for different soils and crops, have been a perplexing problem for the farmers and have been the subject of much investigation by the experiment stations for the past half century.

This paper will discuss primarily the methods of maintaining soil-fertility in the pecan growing districts of the Southeastern States. The soils as a rule in the Coastal Plain are deficient in organic matter, phos-

phorus, nitrogen and potash and the successful grower of pecans as well as any other crop must follow a cultural practice, which will increase the soil's store of organic matter and its nutrient constituents, for the improved pecan is a heavy feeder and flourishes in a soil which is capable of maintaining an adequate water supply. While the pecan is cosmopolitan in the matter of soils in which it grows, it has flourished in its native habitat in the Mississippi Valley in deep, rich alluvial soils. When introduced in the more Eastern States, its growth has generally been successful on the most productive soils, that is, on the soils which grow good farm crops, and unsuccessful on the light soils.

When an orchard is planted some definite and consistent soil building policy should be adopted, the procedure to be followed depending on conditions surrounding the orchard. The growing of cover crops, preferably leguminous plants, can be practiced to advantage. The major part of the vegetative matter produced should be plowed under. If peas are grown as a summer crop the turning under should be done in the Fall.

If a winter cover crop is grown, it should be plowed under green, in the spring before or about the time the trees start their growth.

It is preferable to utilize the entire vegetative growth produced in the orchard as green manuring for enriching the fertility of the soil. However, if circumstances are such that this cannot be done, the pecans should be given half by plowing under a considerable area along the tree row. As a rule, too little attention has been given to this matter by the grower. A crop grown and harvested removes much fertility from the soil and while the stubble which remains helps to furnish organic matter, it does not provide near as much fertility as when the whole crop is turned under. The presence of organic matter in the soil makes it more retentive of moisture, prevents its running together or washing in heavy rains, renders it easier to cultivate and by gradual decomposition furnishes considerable plant food for the growing pecans.

In Plate 1, figure 1 and 2, is a very good example of the result of good and poor management of pecan soils. These orchards are located in the same vicinity in the Coastal Plain section of North Carolina. The soil in both orchards is the Norfolk sandy loam, and the topography, drainage, etc. similar. The trees, which are Frotchers, are ten years old. In the orchard shown in Fig. 1, clover and peas have been grown since the trees were set, clover as a winter crop followed by peas in the summer. The entire vegetative matter produced by the peas has been turned under. The clover has been cut for hay and stubble plowed in. In addition, small amounts of commercial fertilizers have been applied annually. The orchard is successful and a good producer. The orchard shown in Fig 2 has been farmed annually with cotton and corn, no peas or vegetative matter has been grown for green manuring. The trees have made a scant growth, and have produced practically nothing.

A laboratory examination of the soil made in 1921, from the good orchard shows it to contain more nitrogen and more organic matter than the poor orchard. The soil in the poor orchard has become very acid, while that in the good one is only slightly so.

Another illustration of the success of a pecan orchard due to soil management is shown in the two figures in Plate II. These two orchards are situated in the same locality and are on the same soil type. The soil in this case is the Greenville sandy loam, and when managed properly is one of the best pecan soils. It is a soil having a red to brownish surface soil with a deep red subsoil and it occurs quite extensively in the pecan belt of South Georgia and Alabama. The two orchards shown in the plate are of the same age. The field in figure 1 has been well cultivated from the beginning. Leguminous crops have been grown annually and a considerable amount of vegetative matter plowed under. Commercial fertilizers are used in addition. Note the healthy condition of the orchard; it is a heavy bearer. In contrast to this, note the poor condition of the trees in the orchard shown in Fig. 2. Here crops have been grown and harvested and sold as a source of income. Practically no vegetative matter has been

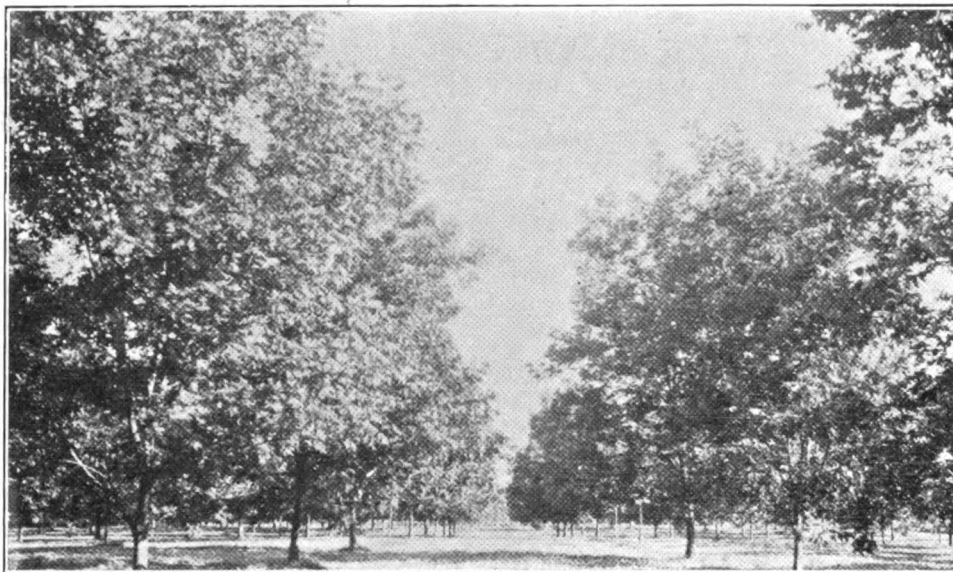


Fig. 1



Fig. 2

Plate 1—Ten year old Frotcher pecans grown on Norfolk sandy loam, Coastal Plain Section of North Carolina.

Fig. 1—The custom of growing crimson clover and peas and using fertilizers has been practiced. The clover is cut for hay and peas plowed under.

Fig. 2—This orchard has been farmed to cotton and corn, no vegetative matter turned under.

plowed under during the life of the trees. Both of these soils originally produced good farm crops. In one orchard a policy of soil building was inaugurated when the trees were set, and in the other the soil has been depleted of its fertility by improper crop management.

A laboratory study of these two soils shows that the soil from the orchard producing the good trees has a higher organic matter and nitrogen content than that from the poorer orchard.

From these and dozens of other cases which could be cited, it is apparent that the soil and its management is one of the big factors in pecan production.

In 1918, the Office of Soil Fertility Investigations in co-operation with two other offices of the Bureau of Plant Industry, began a study of pecan soils and the influence of fertilizers on pecan production. Fertilizer experiments were begun at this time which are located in several points in North Florida and South Georgia. The experiments started at that time to study the effect of fertilizers and cultural management on pecan production are done in co-operation with the Office of Horticultural and Pomological Investigations, and the experiments to study the effect of fertilizers on the rosette of pecans, in co-operation with the Office of Fruit Disease Investigations of the Bureau of Plant Industry.

Experiments are located at Monticello, Fla.; Cairo, DeWitt, Putney, and Oglethorpe, Ga. The tests are located on the Greenville sandy loam, the Orangeburg sandy loam and the Norfolk sandy loam, which are the principal soil types utilized for pecan growing in South Georgia and North Florida. The Greenville sandy loam type is characterized by a reddish brown to red sandy loam surface soil and bright red sandy clay soil, the clay lying 12 to 15 inches from the surface. The Orangeburg sandy loam is a gray to light brown soil to a depth of 10 to 15 inches, and has a red to bright red friable sandy clay subsoil. The Norfolk sandy loam has a gray to dark gray surface, underlain by a yellow sandy clay.

PLAN OF THE EXPERIMENT

The experiment is planned so as to determine the effect of the fertilizing constituents, phosphate, ammonia and potash, singly, and in combination of two and three. The triangle scheme which is familiar to scientific investigators is used in this study.

EFFECT OF FERTILIZERS ON PECANS ON GREENVILLE SANDY LOAM

The data secured in the fertilizer experiments thus far are very interesting and are showing some promising results. It is not possible to go into the detail of the results secured in all the experiments in this paper. However, the data secured in one of these will be discussed briefly.

The experiment at DeWitt, Ga., was begun in 1918 on trees four years old which were just coming into bearing. The orchard used covers an area of 23 acres, and the soil is fairly uniform. Trees on uniform areas were not included in the test and only trees of uniform size were used. By this means of making a tree and soil survey in the beginning and mapping the two factors assurance was had of having the experiments conducted under uniform conditions and with uniform trees. Pabst, Stuart, and Success varieties are grown in this orchard and six trees are used for each fertilizer treatment, eighteen, six of each variety, are fertilized and serve as checks. The fertilization was begun when the trees were coming into their fourth year, five pounds of fertilizer were applied per tree in the early spring of 1918,

1919, and 1920. Ten pounds were applied in 1921. Leguminous crops are grown over the entire area of the orchard and turned under to enrich the soil in humus. Peas of some kind are grown as a summer crop and wheat, oats or rye and vetch as a winter cover crop. All vegetative matter grown is plowed under.

In 1918 when the trees were four years old, the unfertilized trees did not bear, while the trees which were fertilized bore from 2 to 16 nuts per tree. The fertilizers composed of phosphate and potash and no nitrogen produced only 2 to 3 nuts per tree, while the harvest from the trees receiving the high nitrogen fertilizer yielded 10 to 16 nuts per tree. In the second year of the test, the trees being five years old, the unfertilized trees produced an average of 5 nuts per tree, while the fertilized ones yielded from 20 to 50 nuts per tree. Again this year the lowest yielding fertilized trees were the ones which received the mixtures of phosphate and potash with no nitrogen. The yield from this group of fertilizers averaged 20 nuts per tree, while the high ammonia fertilizers produced in some cases as much as 50 nuts per tree. The effects of phosphate, ammonia and potash used singly is interesting. In 1918 the trees fertilized with phosphate alone did not bear, the ones fertilized with ammonia averaged 10 nuts per tree and those which received potash averaged 2 nuts per tree. In 1919 the phosphate tree produced an average of 10 nuts per tree, the ammonia trees, 48 nuts per tree and the potash trees, 14 nuts per tree.

In 1920 the third year of the experiment, the orchard produced a considerable quantity of nuts, the trees being at this time six years old. The average production of the unfertilized trees was 1.2 pounds per tree. Again, the trees receiving the complete fertilizers having a high ratio of ammonia produced the largest yield. While the mixtures having no nitrogen are considerably better than the unfertilized, they are not so good as the ammonia goods.

As the trees grow older, acid phosphate apparently comes into play more strongly and appears to play as important a role as does ammonia in nut production. From the data, potash seems to play a minor role, but if left out of the fertilizer entirely, the yield is decreased. A small amount, however, appears to be sufficient. An examination of the trees in the spring of 1921, two months after the annual application of fertilizer was made, showed that those which received the complete fertilizer are larger, have a denser foliage and are of a darker green and healthier color than the unfertilized, or the ones receiving only phosphate and potash.

From the results secured, it would appear that a fertilizer for a young orchard, where some nitrogen is supplied by the growing and turning under of leguminous crops, should contain approximately 8 per cent phosphoric acid, 6 per cent ammonia, and 3 per cent potash. A considerable amount of nitrogen will be incorporated in the soil from the cover crops grown, and if the vegetative

(Continued on page 9)

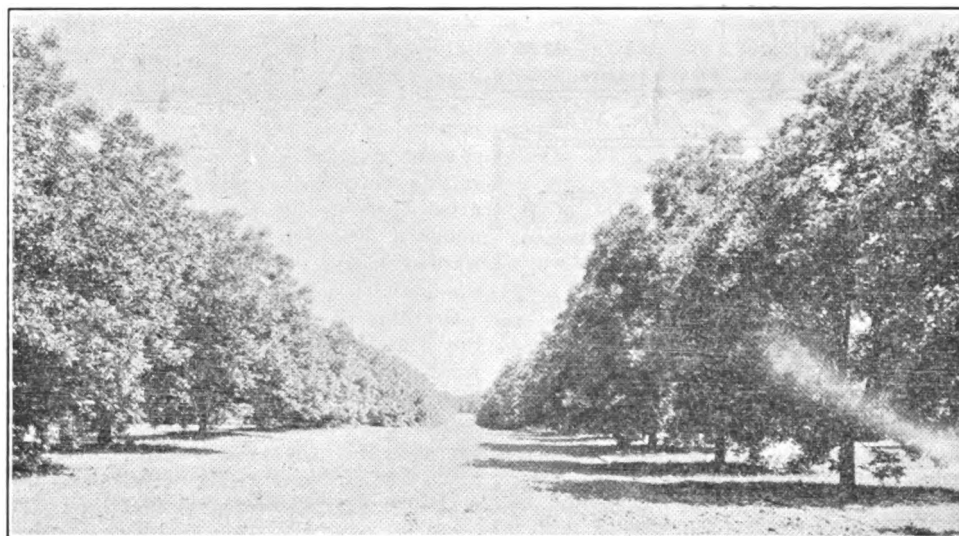


Fig. 1

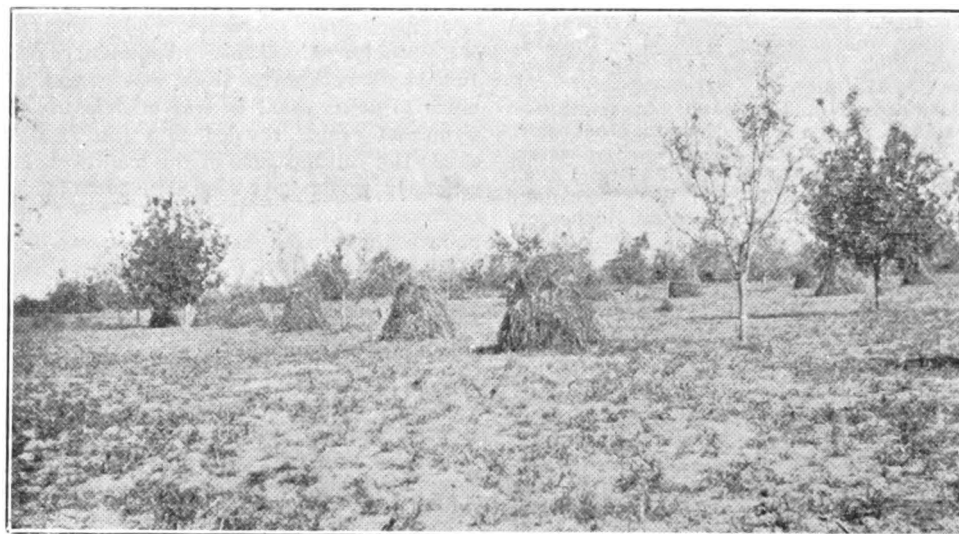


Fig. 2

Plate II—Sixteen year old pecans on Greenville sandy loam in South Georgia.

Fig. 1—Soil has been well cultivated, fertilized and leguminous crops grown and turned under.

Fig. 2—Cultivation has been neglected, corn and hay grown and harvested. No organic material turned under.

American Nut Journal

COVERING NUT CULTURE

NORTH—SOUTH—EAST—WEST

AMERICAN FRUITS PUBLISHING CO., INC.
59 State Street - - Rochester, N. Y.

RALPH T. OLCOTT, Editor and Manager

Official Journal Northern Nut Growers' Assn
Official Journal National Nut Growers' Assn

CONTRIBUTING STAFF

Willard G. Bixby, Baldwin, N. Y.
Benjamin Buckman, Farmingdale, Ill.
William P. Bullard, Albany, Ga.
Col. J. C. Cooper, McMinnville, Ore.
G. H. Corran, Univ'ty Toronto, Toronto, Ca.
Dr. W. C. Deming, Wilton, Conn.
Sydney Dodd, Brooklyn, Fla.
Judge Charles L. Edwards, Dallas, Tex.
Halbert, H. A., Corsicana, Tex.
J. F. Jones, Lancaster, Pa.
Dr. J. H. Kellogg, Battle Creek, Mich.
Thomas P. Littlepage, Washington, D. C.
A. S. Perry, Cuthbert, Ga.
E. T. Ramsey, Austin, Tex.
E. A. Riehl, Godfrey, Ill.
Dr. Robert T. Morris, New York City.
B. W. Stone, Thomasville, Ga.
J. F. Wilkinson, Rockport, Ind.

GENERAL OFFICES

American Fruits Publishing Co. Inc.
59 State Street, Rochester, N. Y.
SOUTHWEST HEADQUARTERS—
Charles L. Edwards, Dallas, Texas
SOUTHEAST HEADQUARTERS—
A. S. Perry, Cuthbert, Ga.
NORTHEAST HEADQUARTERS—
W. G. Bixby, 32 Grand Ave., Baldwin, N. Y.
MIDDLE STATES HEADQUARTERS—
W. R. Fickes, Wooster, O.
NORTHWEST HEADQUARTERS—
Knight Pearey, Salem, Ore.
CALIFORNIA HEADQUARTERS—
Howard G. Kexley, Los Angeles, Cal.

SUBSCRIPTION RATES

One Year, in advance.....\$2.00
Canada and Abroad..... 2.50
Single Copy20

ADVERTISING RATE

Per column inch.....\$2.80
Forms Close 10th of each month

ROCHESTER N. Y., JAN., 1922

NUT ASSOCIATIONS

California Almond Growers' Exchange—
President, G. W. Pierce; manager, T. C. Tucker, 311 California St., San Francisco.

California Walnut Growers' Association—
President, C. C. Teague; secretary, W. T. Webber; manager, C. Thorpe, 1326 East Seventh St., Los Angeles, Cal.

Georgia-Florida Pecan Growers Association—President, J. M. Patterson, Putney, Ga.; vice-pres., A. C. Snedeker, Blackshear, Ga.; sec'y-treas., J. S. Wight, Cairo, Ga. 1922 meeting, Thomasville, Ga.

National Nut Growers Association—Prest., Charles A. Simpson, Monticello, Fla.; vice-prest., J. M. Patterson, Putney, Ga. and E. C. Butterfield, Winona, Tex.; secy., J. Lloyd Abbot, Spring Hill, Ala.; treas., J. Slater Wight, Cairo, Ga. 1922 meeting, Thomasville, Ga., Oct. 4-6, 1922.

National Pecan Growers' Exchange—President and manager, William P. Bullard, Albany, Ga.; vice-pres., J. B. Wight; secy-treas., A. D. Galt.

Northern Nut Growers' Association—President, James S. McGlennon, Rochester, N. Y.; vice-prest., J. F. Jones, Lancaster, Pa.; treas., Willard G. Bixby, 32 Grand Ave., Baldwin, N. Y.; secy., Dr. W. C. Deming, Georgetown, Conn. 1922 meeting, Rochester, N. Y., Sept. 7-8.

Texas Pecan Growers' Association—President, J. H. White, Mason; vice-prest., William Capps, Fort Worth; secy., J. H. Burkett, Austin, Tex.; exec. Com., J. H. Burkett, Austin; Prof. Will H. Mays, Austin; Prof. A. Caswell Ellis, Austin.

Western Nut Growers' Association—President, Ferd Groner, Hillsboro, Ore.; secy-treas., C. E. Schuster, Corvallis, Ore.

Requires Two Copies

Thomas F. Miller, Allentown, Pa., who has regularly subscribed for two copies each month of the American Nut Journal since January 1919, writes:

"I get two copies every month so that I can keep one on my file in case the other is lost, as I pass one copy around to many of my neighbors to read."

A LESSON FROM NATURE

Among the samples of pecans from the Southland which came to our desk this season are Schley, Success, Delmas and Halbert, from Charles L. Edwards, Dallas, Tex., the veteran pecan expert of the Southwest. These engaged the special attention of the editor because of what seems to him their remarkably high quality as to delicacy and flavor of kernel. We have long thought that in making an appeal to the eye in the matter of size, producers of pecans are likely to sacrifice quality. It must be that C. A. Reed, nut culturist, has this in mind when he cautions the pecan growers of the South to bear in mind that some of the best of the native pecans rank high in quality in comparison with the commercial varieties, and that this is particularly true in the case of the northern native pecan.

Judge Edwards writes: "I am sending a little package of under-sized pecans. Satan came to see me this season, brought his knitting and seated himself on my doorstep. You will note that Delmas made the best response to irrigation with our mineralized city water. That variety is steadily growing in favor, not only with me, but in all this region where opportunity has been afforded to compare its average behavior with that of other sorts."

The latch string on the Judge's door works easily, as the editor of the Journal, like many others, can attest. The modest home on West 12th Street, Dallas, has long been the Mecca of the discerning. We have crossed the doorstep where His Satanic Majesty dared to pause and we know the latter gained small comfort from the Judge's impenetrable optimism.

Spring frosts followed by continuous rains when the trees were flowering and a searching visitation of hail as the nuts were setting caused some sorts of pecans to be so dried up as to be worthless and all to be under size—a wicked season as Mr. Edwards remarks at first thought, glancing at the doorstep.

Granting that the samples sent us are of the best the season produced on the Edwards trees, may there not be a lesson of high value in the experience? The Judge's Schley, Success and Halbert pecans this season resemble the type only in form and flavor. They are markedly under size. Delmas is much nearer the normal size. But these nuts are all of remarkably high quality. The kernels are of fine, light color, the shells are well filled and the kernel quality is of the highest character, tender, buttery, of pronounced flavor. Apparently the Judge's thoroughbred trees, not having as much to do as usual by way of finishing off a normal crop, crowded into the smaller shells the full measure of the quality which regularly would have been distributed in less condensed form into larger containers. We believe there must be many persons who would preferably pay for such nuts the price of larger nuts which would suffer in comparison as to quality while at the same time excelling in size. There are thousands of purchasers of apples who will pay as much—if not more—for the rich flavored Western New York apple whose growth has been retarded as for the much larger, highly colored apple of the Pacific Northwest which has been forced by irrigation. Right in this connection should be considered the high quality of some of the native pecans, North and South.

We are not arguing that spring frosts, continuous rains at flowering time, hail, drought, etc., are desirable factors in pecan growing. Our point is that among the many

things the grower must keep in mind may very well be a comparison of results of the production of apples in Western New York and in the Pacific Northwest. Thinness of shell is always a desideratum in the pecan, large or small; but is size rather than quality to be aimed at if size and highest quality cannot be combined?

We have before us graded pecans from native trees in Southern Indiana which in everything except size challenge many of the cultivated pecans of the Southeast.

The cultivated pecan of the present day is big enough. Effort, in our opinion, henceforth should be centered upon the matter of quality, at the same time that volume and regularity of bearing are considered. The lesson of a wicked season in Texas, it would seem, lies in consideration of a modification of natural conditions which produced nuts of so high a quality as those which caused these observations.

A DOUBLE-PURPOSE FOREST

In a recent issue of the Rural New Yorker, E. O. Fippin, discussing the forestry problem in New York state, refers to the hill lands of Southern New York, large areas the cultivation of which is not economical under present conditions. He directs attention to the fact that there is a wide range in productive quality and accessibility of the hill lands. The subject elicits a suggestion concerning this and much other land in the state which cannot be farmed to advantage. The state has been very active in its forest policy aimed at the encouragement of reforestation, but not much actual progress in the field has been made. The timber crop is too long between harvests to recommend itself strongly to the average individual. Reforestation must be practiced under a plan of organization that is longer lived, and because of the financial problems involved, it needs to be on a quasi-public scale.

The particular point of Mr. Fippin's argument in this article is to urge consideration of the development of forestry, in such a case, on a county basis like the Farm Bureau; that each county, on its own referendum, initiate a policy of county forests on the cheaper and more remote lands.

We believe that right here is where the Northern Nut Growers Association should be heard by the state authorities in regard to the advisability of planting nut-bearing trees in any forestry development of Southern New York. That territory is on the 42nd parallel of latitude. It is suited to the growth of black walnut, hickory and butternut trees at least, and it is close to the state of Pennsylvania where thousands of Persian walnut trees are growing. The forestry authorities speak of timber production. The trees named above are highly valuable for timber, and they will produce nuts in abundance while making timber. The Northern Nut Growers' Association can co-operate with the state authorities especially in the matter of improved varieties of the nut trees named. Since there are not available many trees of the improved varieties, state nurseries could be depended upon to produce them for this public purpose. Why not plant a double-purpose forest? A new idea in forestry.

Ten years ago pecans in the woods near ing. The few that were sold brought from five to eight cents a pound. Now the native pecans sell for 20 cents a pound, and the woods are posted

If it relates to nut culture it should be in the AMERICAN NUT JOURNAL. Please send it in.

Nut Notes From Long Island

Editor American Nut Journal:

During the past two or three weeks I have been transplanting various nut trees, hickories and pecans that grew from nuts planted in 1920 and various species of walnuts that were planted in 1921. I thought perhaps my notes would be of interest to some of your readers.

Shellbark hickory seedlings, *Carya laciniosa*, were every bit as large as pecans of the same age. The nuts from which both of these grew came from the same section, southern Indiana. This certainly suggests that the shellbark may be a valuable stock for the hickory. At the present time the usual practice is to use pecan as the stock on which to graft all varieties of propagated hickories excepting the bitternut hybrids for which the bitternut is usually used. In some instances I have been inclined to seriously question as to whether the pecan is the best stock for all the varieties of hickory for which it is now used. I think that a trial of the shellbark for this purpose is well worth while. I might also mention that shellbark seedlings have grown on the average as fast as bitternuts of the same age. It should be said in this connection however that the growth of these pecans and hickory seedlings of the varieties named, pecans, shellbark and bitternut which are, so far as I know, the most rapid growing of the hickories, is in two years not equal, as a general rule, to the growth of walnuts the first season, either of butternuts, black walnuts, English walnuts or Japan walnuts.

The most rapid growing seedling raised in 1921 was a Cording seedling which shows a height of 30 inches the first year. Cording is a hybrid between *Juglans cordiformis* and *Juglans regia*. No pure species of walnut has shown a seedling over half this height in the same period. This illustrates what has been emphasized before as to the rapid growth of some hybrid seedlings.

Observations on the hazels are interesting. I have here many varieties raised by Mr. Conrad Vollertsen plants of which are being sold by the L. W. Hall Co., Rochester, N. Y. These have been set out during various times for the last three years. The first ones were set in heavy clay loam, which makes up the soil of the greater part of the land. This seems to be fine for walnuts, hickories and pecans but the hazels develop slowly in it. About a year ago I moved some hazels to the only sandy patch I have. The plants showed appreciation right away and quite a proportion of the varieties have catkins giving promise of nuts next year. The same may be said of quite a number of the wild hazels from various parts of the country which I have been assembling here for the past year or two. Last summer was a hard summer for them and I lost quite a number of them. I had been under the impression that the hazel could stand mostly anything but it was very evident that it would have been better had I watered them last summer. Those that did not die are showing catkins in a number of instances.

Marked differences between the buds of the American species and the European species are noted. On the American species the buds are tightly closed showing not the slightest sign of green, while the buds of most of the European species show green. There is considerable variation in the green showing on these, *Althaldensleben* and *Merville de Bolwiller* showing the least green while some other varieties, notably *Barcelona* and *DuChilly* look so green that

you might think that they would put forth leaves next week, at least in some cases the buds are so swollen that you might think this would occur. In the case of the native hazels of the Pacific Coast the buds are swollen although not showing green. I shall watch all of these plants where the buds are now showing green with interest to see if they go through the winter unharmed. I will not be greatly astonished if they winter kill but I do know that the *Barcelona* at least stands the winters of Connecticut without any winterkilling although so far as I know it does not bear to any extent. The tree hazel, *Corylus cornuta*, shows very little indication of showing green, although the buds are not so tightly closed as the American species. This hazel, we know, is quite hardy.

WILLARD G. BIXBY.

Baldwin, N. Y., Jan. 6, 1922.

President James S. McGlennon

President James Shaw McGlennon, of the Northern Nut Growers Association, was born in Colborne, Ontario, Canada in 1872 of Manx-Scotch stock. Starting in the Nursery business in the office of his father at 16 years of age, he continued in retail Nursery lines, moving to Rochester, N. Y., in



JAMES S. MCGLENNON, Rochester, N. Y.
President Northern Nut Growers Association

1905 when he started his own Nursery business. In 1911 he became interested in pecan culture in the South and in filbert culture in the North. In 1913 he accepted the general agency of the Georgia Paper-shell Pecan Co., Albany, Ga., which owns the Bonnie Brae plantation of 3000 acres. Pecan groves of 5-acre dimensions are planted and developed. In 1918 with others he purchased the Gill pecan grove, 17 miles south of Albany, Ga., containing 100 acres. He is the president and manager of the New York state corporation, Georgia Pecan Groves, which operates this property. He is also broker for the National Pecan Growers Exchange, Albany, Ga.

The rise and progress of the filbert Nursery which Mr. McGlennon and Conrad Vollertsen established near Rochester, N. Y., eight or nine years ago has been outlined in these columns. There are four acres producing 50,000 plants. It is the only filbert Nursery east of the Pacific Coast states, so far as is known. The output is distributed through L. W. Hall Co., and Alfred H. Diprose, Nurserymen, Rochester, N. Y.

President McGlennon has long taken an active interest in the work of the Northern

Nut Growers Association. He is one of its most energetic workers and has been especially active in efforts to increase its membership and also in advocating the planting of the improved varieties of nuts which the Association has largely been instrumental in developing. He is planning an interesting and instructive convention of the Association in his home city next September.

Soil Fertility

(Continued from page 6)

matter is turned under each year the quantity of nitrogen in the fertilizers, which is the expensive element, can be reduced as the trees grow older. Under this system of cultural management, it would seem advisable to fertilize with an 8-6-3 goods until the trees are 7 to 8 years old.

Some interesting data have also been secured in another experiment with older trees on the Orangeburg sandy loam, a soil closely related geologically to the Greenville sandy loam, in which it is apparent that phosphate plays an important part in nut production. From trees which have reached an age of 8 to 10 years it appears that the proportion of nitrogen in the fertilizer can be reduced so as to carry about 4 per cent and the proportion of acid phosphate increased.

In this experiment Alley, Schley and Stuart were used, the trees being 9 years old in 1918. Fifteen pounds of fertilizer were applied per tree in 1918 and 1919, and 20 pounds in 1920. In 1920, the third year of the test, the fertilizers producing the largest yields gave as much as 6 pounds per tree more than the checks. The mixtures producing maximum yields have a high ratio of phosphate, a moderate proportion of ammonia and a relatively small proportion of potash. The mixtures of nitrogen and potash with no phosphate produced a yield scarcely better than the unfertilized trees. This is also true of the mixtures containing no ammonia.

The data secured thus far indicate that for older trees, and where considerable amount of organic matter is supplied to the soil by means of growing and turning under of leguminous crops, a fertilizer analyzing approximately 9 per cent phosphoric acid, 4 per cent ammonia, and 3 per cent potash should give good results. As to the source of materials for this and also the formula for younger trees; the phosphate can be derived from acid phosphate, the ammonia, one-half from inorganic sources as sodium nitrate or ammonium sulphate, and one-half from organic materials as cottonseed meal, dried blood, fish scrap, tankage, bone, and the potash from either sulphate or muriate of potash.

U. S. Dept. Agriculture,
Washington, D. C.

Much Land Awaiting Food Crops

Our 40 per cent, of untillable lands in the United States can all be made, by nut and other tree crops, as productive as the tillable. There is but a small percentage of this untillable land, excepting that on bleak, barren mountain tops, which cannot be made to carry food crops equal in value to those of the 60 per cent of tillable land.

For example, nearly one-half of the land in Connecticut is considered to be non-tillable land. To my personal knowledge there is little of such land in that state which cannot be made to raise nut crops more valuable than most of the crops now raised upon the tillable land of the state.—Dr. Robert T. Morris.

Plans for a large nut products factory in Newport News, Va., are under way.

Just mention AMERICAN NUT JOURNAL.

Digitized by Google

METHODS OF SCORING PECANS

There are only two scores of any practical value in testing the merits of pecans. One of them is from the producer's standpoint and the other is from that of the consumer. A single word,—prolificness,—embraces the merits to the producer. For if a tree fails to yield abundantly annual crops—it is immaterial how high the nuts might score in all the fanciful points used pertaining to taste—it is an unprofitable nut to grow. Besides, taste is a variable quantity in different individuals, so recognized in ancient times that we have the Latin proverb handed down to us "Degustibus non est disputandum." (We should not dispute over our tastes).

The words "per cent of kernel" cover the consumer's score. Yet less stress has been laid on this score than any other and until lately it has been ignored entirely. What does it matter to the consumer if the pecans are as large as coconuts if he only gets from twenty to thirty per cent edible matter out of them? And what does it matter even to the producer if he can grow them that large but the trees yield only a few dozen nuts every two or three years? Yet more stress is still being given to size than to any other single score. Flavor is also of little or no value as to different varieties. The pecan of course has its distinctive flavor from all other nuts, but one individual may favor one variety while another person may prefer some other variety. It is the same about the color and shape of the shell. The thinness of shell is important and so is the ease which the kernel can be extracted, but the thinness of shell is naturally covered by per cent of kernel, for a thick shell will naturally weigh heavier and turn out a less per cent of kernel; and crackers and shellers are generally used to make it easy to extract the kernels.

It is a snare and a delusion to the uneducated consumer to put on the market the jumbo hollow shell pecans that will yield only 40 to 45 per cent kernels, when a medium sized pecan will yield 55 to 65 per cent kernel. It is a subject the pure food law will take cognizance at no distant day and require the producer to send the per cent of kernel along to market with his pecans. When this is done the producer will turn his attention from trying to grow the biggest pecan as its chief merit and endeavor to grow the pecan that is most prolific and yields the greatest amount of human food to pound of nuts.

H. A. HALBERT.

Coleman, Texas.

Kyleshires vs. Puccons

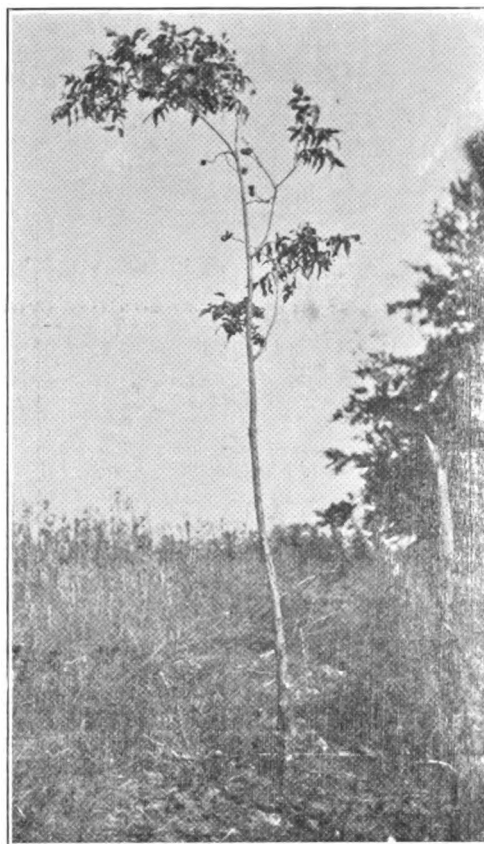
The State Press editor of the Galveston, Texas, News, being duly in receipt from Prof. E. J. Kyle of a consignment of pecans in a package containing three compartments, makes bold to speak in this fashion from a layman's point of view:

The first compartment is a group of nuts labeled "Typical Native Brazos Bottom Pecans." They are of small size, hard shell and long snout, showing no evidence of college breeding or even home-made suavity. The next exhibit, containing fewer specimens, is named as "showing quality without size, resulting from scientific care and culture." In the third classification are still fewer units, "showing quality and size resultant from still more scientific care and culture." It is a graphic exhibition of the difference between ordinary razorback pecans and the thoroughbred Kyleshires. To raise the flinty, dunghill type when it takes no more tree to grow the thin-skinned, volup-

tous species is a sheer waste of leaf, limb and blossom. Although State Press has never raised a pecan, preferring, as he has to invest his money in get-rich-quicker proposition, he will say with all the positiveness of which he is capable that any man who grows third-class pecans when he might just as easily produce an article fit for a parlor ornament is treating his country badly. Of course S. P. realizes that the Brazos bottom diminutives here mentioned were not raised by anybody. They grew up volunteer. Naturally under that condition they had no animating ambition, no object in life, no school to go to. Also it may be admitted in their favor that they afford considerable interest to those who hunt for them in the autumn-tinted woods. But for those Brazos bottom tightbarks Lee Rountree would miss many a lovely Sunday afternoon, by reason of lack of incentive to ride his pacing mule out of Bryan and put in half a dozen silvery hours hunting puccons in the umbrageous depths of the leaf-strewn Brazos. Lee was raised to call them puccons, and the sort he was used to before he saw the kind they make at the A. and M. College are still called puccons.

Along the Wabash and Ohio

From best reports that I can get, the crops on the Kentucky, Warrick, Posey and



THREE-YEAR-OLD MAJOR PECAN TREE Producing Ten Nuts, Fall 1921. J. F. Wilkinson, Rockport, Ind.

Butterick trees were light, while the Major tree produced about 265 pounds and the Greenriver about 300 pounds. The crop generally in the Greenriver grove was light.

The crop on the native seedling trees in this section was very light this season, though my young budded trees nearly all produced a few nuts.

Several of my six-year-olds produced from a few to more than 100 nuts each. One Busseron tree transplanted eight years ago produced 125 nuts. Am sending photograph of one of its clusters (actual size); also photo of a 3-year transplanted Major tree that produced 10 well filled nuts. This Major tree is growing right on the top of a high clay hill. The question is often asked, will pecan trees bear nuts on upland? Here is the answer for many prospective planters.

J. F. WILKINSON,

Rockport, Ind.

Pecan Trees for Kentucky Highway

J. F. Wilkinson, Rockport, Ind., writes: "There is now under construction a state highway from Louisville to Paducah, Kentucky, near the Ohio river, and one land owner across the river from Rockport, Ind., has already contracted for pecan trees to plant one every 50 feet on either side of the road through his farm a distance of three-fourths of a mile. This will be the first real roadside planting that I know of in this section. It will probably be followed by others, as Mr. Waitman is the owner of the parent Kentucky tree and realizes the value of pecan trees budded to these fine varieties. He is a very influential and progressive man in his neighborhood and is insisting on his neighbors planting trees along their roadsides."

THE PISTACHIO

The Pistache Industry

Pistache nuts, which are familiar to many chiefly in confectionery and as a source of flavoring, are now produced in considerable quantities in the United States.

The largest and sturdiest trees that grow in the deserts of the old world—the Sahara, the arid slopes of the Euphrates valley in Asia Minor, and the dry wastes of Beluchistan and Persia—are wild pistaches. The fact suggested to the United States government plant bureau the idea of introducing the pistache into the Southwest U. S. Seedlings, grown in the experimental gardens at Chico, Cal., have been distributed by thousands to fruit growers in California, Texas, Utah and elsewhere.

Seeds from the old world desert trees were obtained to furnish drought-resisting stocks; and, for grafting, and budding the best varieties were brought from Sicily, where the finest cultivated pistache nuts are produced. Also superior varieties were imported from Asia Minor, where pistaches are commonly eaten roasted and salted, like peanuts.

When writing to advertisers just mention "American Nut Journal."

ALL INTERESTS CO-OPERATING

ATTENTION to the mutual interests in the Nut Industry is succinctly directed by Manager T. C. Tucker of the California Almond Growers Exchange: "We are a strictly co-operative organization, including Grower, Broker, Wholesaler and Retailer."

This may be said also of organized effort in the production and distribution of Walnuts and Pecans, each of which is represented in Associations.

It is because of this co-operative feature that the *American Nut Journal* combines the news of the Nut Industry in the fields of Production and Distribution. Its Market and Crop Reports will be of increasing value.

It is of prime importance that the market shall be supplied; a supply is the basis upon which a market exists.

It is also of prime importance that a market be created and maintained; distribution of the product is what makes the industry.

The Journal desires to co-operate heartily with producer and distributor, and to that end welcomes frequent communications by way of comment on current events, personal mention, trade news and suggestions. It is the logical medium for interchange of trade comment and the recording of trade activities.

HOW THE NATIONAL PECAN EXCHANGE OPERATES

President William P. Bullard, Albany, Ga., before the Mississippi Horticultural Society

The fact that pecans mature so late in the fall makes imperative the necessity for a highly organized, efficient and quick acting marketing organization. English walnuts as a rule mature six weeks ahead of our large pecans and almonds more than two months earlier. The dealers therefore are accustomed to getting all the walnuts and almonds they need for the Thanksgiving trade and naturally expect the same of pecans; but the fact is that not all of the pecans can ever be shipped out for the holiday trade which closes shipments from the first to tenth of December.

The day of co-operative marketing is at hand. On every side we hear of this, that and the other marketing association and its good results. Farm papers and public press generally have taken up the slogan of co-operative selling, which means briefly stated, a systematized and standardized and concentrated market. But hitherto the pecan growers have been loath to take up co-operative selling for the reason that prices were good and demand abundant and as long as such conditions exist agriculturists hesitate to go into any kind of common undertaking whether it is the selling of pecans, fruits, vegetables or anything else.

But this year has taught many a grower the fallacy of thinking he is sufficient unto himself. While it is true that individual growers here and there have sold this year at good prices yet for every such lucky one there are others who have not found buyers at any price. Growers who would not listen to us three months ago are today writing and calling to have us take their pecans off their hands. Many have tried selling to dealers direct as they have in the past, and many thousands of pounds of fine pecans have been shipped to commission houses in cities to be sold at any price readily obtainable. The result is that the comparatively few pecan open markets in the country are over supplied and prices on the toboggan. I could give you specific instance after instance, but suffice to say that the situation today is exactly as I have just outlined.

We often hear people say that this and that and the other place has never seen the large pecan. True, very true. But how are pecans to be introduced to all of these new places? By this co-operative marketing exchange. Individual marketing cannot reach them and even if they did the sellers would all be bucking against each other just as they are today, and that would be profitless.

While all nut markets can be reached by concentrated efforts of this Exchange, yet it will require the loyal united support of the growers to do it. It is neither fair nor effective for a few growers to join in this work and let the rank and file take advantage of it. We should all come together in this common undertaking. And it will require not only the co-operation but perhaps some sacrifice on the part of the growers to enable the Exchange to accomplish these things. The Exchange is not a magic or miracle worker. Many growers think it is a place where they can dump all the nuts they cannot sell themselves—dump them one day and get check in full account the next day. No such philanthropical co-operative marketing association has ever been or ever will be organized in the pecan or any other industry.

Lack of time precludes my giving a complete outline of the work of our Co-operative Association but you are naturally desirous of knowing how you can avail yourselves of this Exchange work; in other words, how you can become a member of the organization. Briefly I will say that we have in Albany a plant for curing nuts when necessary and for grading and classifying and packing for the National Pecan Growers Exchange to sell.

To those who live near enough to Albany the cheapest thing is to ship your nuts there and have them pooled and handled and sold with all the other members participating in our Albany local. We are this year having nuts shipped to us from all over Georgia,

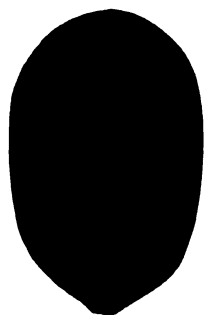
Alabama, and Florida. We think the time will soon come if it has not already arrived when the growers of Mississippi should begin the organization of locals with the help, direction and care of the National.

Some may think that every locality could organize the growers tributary to its location and go it alone in the markets independent of every other one, but this would be repeating the mistake of the Walnut Growers of California. In the early days of the walnut industry the growers independently found ready markets at attractive prices but as soon as production increased these markets became overdone and prices fell below cost of production. Then one locality after another formed its own local organization to grade and sell until finally about thirty local organizations were thus in operation with their independent selling forces and independent everything else; but they soon found that every locality was pitted against every other locality and the buyers really had them more at a disadvantage because they only had to deal with the heads of the different locals instead of going to the individual growers. The result of that sort of

thing was disaster until all these several local organizations came together under one marketing head with uniform grading methods and uniform everything else. Since that day of unification and concentrated marketing control the walnut business of California has flourished as never before until today there are probably more than eighty thousand acres in the state of California planted to the English walnut.

We are passing through a history similar to the walnut and almond people as well as the raisin and citrus fruit growers of California. Will we profit by their mistakes or will we repeat their errors? This National Exchange has now become established in the markets and has a vast accumulation of knowledge and experience that is at the service of the growers if they will come together and avail themselves of it. This national is not a local organization of the Albany growers but is meant to be national in scope and character and the location of its principal office can easily be moved westward to be more nearly in the center of the combined field it serves.

TEXAS' LARGEST AND MOST DEPENDABLE PECAN NURSERY



Buy the best rooted, budded Paper Shell Pecan trees FROM THE LARGEST EXCLUSIVE PECAN NURSERY WEST OF THE MISSISSIPPI RIVER AND ONE OF THE LARGEST IN THE SOUTH. 90 to 100 per cent of our Pecan trees live. Will the trees you have been buying do this?

A good lateral root system like we grow, and like is shown on the left side of picture is the life and making of a pecan tree, and they must have these roots if you grow them successfully.

You can buy our well rooted pecan trees just as cheap, and in many cases cheaper direct from us than you can get the trees like are shown on the right of this picture from other nurseries or their agents.

We dig them well, pack well, and get them to you in first class condition.



The Root System We Grow

The Kind of Roots Most Others Grow

Haven't you been buying trees with roots like the ones shown on right side of picture that didn't have scarcely any side roots? Did they give good satisfaction? 90 to 100 per cent of our trees live and grow on account of the wonderful lateral or side root system they have which enables them to reach out in all directions from 24 to 36 inches and gather all the necessary plant food and moisture. Our trees will be worth three times more to you than the poorly rooted trees that are grown by 90 per cent of the pecan nurseries.

TEXAS PECAN NURSERY

ARP, SMITH CO., TEXAS

R. W. FAIR, Manager,

We Sell by Mail Only and Save You the Middle Man's Profit

If you are interested in pecan growing write for our 32-page FREE booklet on "How to Grow Paper Shell Pecans," which will also give order blank and all information necessary to order trees.

Send in your order at once, as our trees are not going to last long.

Haven't you seen our exhibit at the Dallas Fair, in the Agricultural Building, for the last four or five years?

PEACH TREES—Write to Fair's Peach Nursery if you want peach trees in any size lots. The trees are fine and the prices right. Large orders especially solicited.

The American Nut Trade: Market and Crop Reports

PERSIAN WALNUT

Oregon Walnuts in Great Demand

Marketing English walnuts during the 1921 season has been a comparatively easy undertaking. Owing to the light crop and the bare condition of the market before the new crop was harvested the greatest problem connected with the enterprise has been to fill orders and supply the demand.

Increased acreage of young trees just coming into bearing and a heavy yield has made the largest crop of walnuts ever harvested in Oregon. This tonnage, however, was not larger than to supply the immediate demands of buyers within the state and from one to two cents a pound above California opening prices was secured for the entire tonnage handled by the Oregon Growers Co-operative Association. Oregon buyers, knowing the superior quality of the Oregon Franquette, took practically the entire tonnage at the higher prices as soon as they were named.

While there has been little difficulty in moving this season's crop at good prices, the association is looking forward toward years of heavier production and markets that are more heavily stocked when sales will not come as easily. Standard grading machinery has been installed and careful grading has been rigidly adhered to, giving a product of uniform quality and size.

Samples sent to brokers in various markets brought returns worth noticing. A large brokerage concern in New York wrote: They are the finest walnuts that we have ever seen, either produced in the United States, Europe or anywhere else in the world. We are only sorry that you are not in a position to give us five or six cars, as we feel sure we could sell that quantity without any particular trouble if you were in a position to offer."

Another broker was so desirous of securing some of the nuts that he has already put in his order for a car of the 1922 crop.

The outlook is most encouraging for the Northwest walnut grower and it is felt that increased plantings of walnut stock will be warranted in sections adapted to walnut production.

The quality of the Oregon walnut is unexcelled.

Salem, Ore.

B.

Walnut Growers Optimistic

Santa Ana, Cal., Jan. 1—Orange county produces more walnuts than any other county in the state and more nuts are shipped from Santa Ana than from any other point in the United States. According to estimates made by Carlyle Thorpe, general manager of the California Walnut Growers' Association, Orange county this year will produce 2000 tons more than any other of the walnut producing counties in the state. There are nine associations in the county and estimates made some weeks ago indicated a total tonnage of 5938 cars. It is believed the actual receipts at the packing houses of shipping nuts will be about 900 tons less.

This product will increase the total income of the county for 1921 by more than \$3,000,000. Early estimates for the various associations were as follows: Santa Ana, 2069 tons; Orange County Association, at Santa Ana, 147; Richland, at Orange, 750; Garden Grove, 522; Anaheim, 650; Fullerton, 585; La Habra, 175; Irvine, on San Joaquin ranch, 775; and Capistrano, 265.

The California Walnut Growers' Association, it is believed, has sold all the nuts it will handle, and it is declared there will be

a shortage in the tonnage sold, due to the fact that the yield was not as heavy as early estimates indicated it would be. The demand is good, the prices satisfactory, the growers "sitting pretty" and it is said they face this year with prospects of satisfactory prices on a market bare of California nuts.

California Walnut Institute

The California Walnut Growers Association being primarily a marketing organization the need for a conference on cultural matters is supplied by an annual conference in the form of a walnut growers' institute, the 1922 meeting of which was scheduled for January 13th at Santa Ana, Cal. Arrangements were made to accommodate several hundred walnut growers. Among the matters to come up for discussion are the orchard problem, pruning, spraying, dehydration and the gathering and curing of the crop. W. M. Belding, president of the Orange county farm bureau presided and addresses were delivered by prominent walnut experts.

Walnut Branding Machine

If plans now held in mind by the California Walnut Growers' Association are carried out, the brand-stamping machine being perfected by the association will be put into use at some association packing house next season, and if it stands up to the work it will be operated all season. If the season's run prove successful, a brand-stamping machine may be installed in every association packing house in the state for the 1923 season run.

This statement was made in Los Angeles by Carlyle Thorpe, general manager of the walnut association. "The association," said Manager Thorpe, "has been at work developing this machine. About \$20,000 has been spent in making a machine and working out the difficulties that have arisen.

Walnut Growers Subsoiling

Santa Barbara, Cal., Dec. 20.—The local walnut growers are all subsoiling in expectation of the winter rains. Those who have wells are irrigating. They are planting cover crops of peas and meadow lotus, to be turned under for fertilizer. The local growers are pruning their groves, some of them are pruning very heavily, according to J. W. Doolen, the secretary of the Santa Barbara County Walnut Growers association.

50,000,000 Pounds of Walnuts

Heavy shipments of walnuts to the Atlantic seaboard have been made by the California Walnut Growers Association, 500,000 pounds per steamship. The saving over the rail rate is said to be more than 1 cent per pound. Southern California grows 96 per cent of the production of walnuts in the United States. This season's crop approximates 50,000,000 pounds.

Irrigate Now for 1922 Walnuts—The farm adviser of Ventura county, California, has been urging the fruit and nut growers to irrigate heavily this fall and not to wait for the winter rains. Over a period of years it has been noticed that when early rains come the next year's crop is usually a heavy one, so now that the rains are late in coming, he suggests that irrigation be resorted to. It has been definitely proven by several dry year observations, that those orchards or portions which have been irrigated early have been uniform in yielding a larger and better crop than the acreage not so watered.

The Santa Paula, California, walnut season closed last month with a total output valued at \$400,000.

Retail Prices in a Northern Market—A large grocery in Rochester, N. Y., on Dec. 29, 1921, holiday season, offered mixed nuts at 18c; walnuts, budded, 39c; No. 1 walnuts, 36c; black walnuts, 19c; walnuts, 25c; Brazils, 15c; almonds, 35c; filberts, 10c; pecans, 75c; butternuts, 10c; hickory nuts, 12c.

BLACK WALNUT

The Idea Appeals

The editor of the Washington, Pa., Reporter says: "A recent article in The Reporter concerning the planting of black walnut trees informs us that the shade trees in America are estimated to be worth a billion dollars. You know how much more you would be willing to pay for a lot with a beautiful tree or two on it than for ground that is bare. While you may not reap any material profit from planting oak, walnut, hickory or maple trees, your children may benefit by them; at least you will have something to provide for future generations. With characteristic rush the American people have planted poplar trees, as the ruined cisterns and wells of almost any town amply illustrate. It is better to plant some slower growing tree that will not be a pest when it approaches maturity. If someone would start the movement we, too, could procure several bushels of walnuts from the George Washington estate at Mt. Vernon, as Saginaw, Michigan, did. These nuts distributed to the children of the county and planted in school grounds and along roadways would grow to be a great testimonial of the good sense and high ideals of the present age."

Another Carload Black Walnuts

Lewis Webb, Pawnee City, Neb., has shipped a carload of black walnuts to Denver, Colo. They were not all bought from farms in Pawnee county, but in Johnson county, Gage county, Richardson county and Northern Kansas. Evidently the black walnut will thrive and produce crops in Nebraska and Kansas—a good section in which to start groves of the improved varieties. Two carloads of black walnuts were shipped to Colorado recently by a Carthage, Mo., grocer. Colorado bids fair to be a good black walnut market. The market and the producing land are available. Why not go to it?

On the Flynn farm of 781 acres near Des Moines, Ia., purchased by the state for a custodial farm are many black walnut trees. Those which are dying will be turned into lumber. The younger trees will be preserved. The propaganda is proving effective.

THE FILBERT

Oregon Filbert Exhibit

The nut exhibit of Dr. J. M. Powell of Monmouth at the Independence corn show attracted much attention, says the Independence, Ore., Enterprise. Dr. Powell is one of the recognized authorities on nut culture and has developed orchards of filberts and English walnuts, which are so far superior in quality and size to the average commercial products that they attract attention.

In the filbert display were Gant d. Halles, Barcelona, Daviana and DuChilly, with pollenizers La Fidalgo, White Aveline, Red Aveline.

In the walnuts there were: Vrooman Franquette seedlings, grafted Franquettes (imported stock) and Mayette seedlings.

O. K. Dewitt, Salem, Ore., says there has been a great interest in the planting of filberts this year. In fact, planting was stopped simply because the supply of trees at the nurseries was exhausted. He estimates that fully 25,000 trees were planted in that part of the valley this past season.

E. Moulie, 522 Bryson bldg., Los Angeles, Cal., declares that he has seeds of a tree which produces an edible nut, the shell of which has the properties of commercial soap, according to the Los Angeles Evening Express, which states that Moulie has been swamped with requests for seeds.

If it relates to nut culture it should be in the AMERICAN NUT JOURNAL. Please send it in.

THE PECAN

GEORGIA

5,000 Pounds Pecans As a Side Issue

Grown on fourteen acres T. J. Darling will have this season a crop of 5,000 pounds of as fine a lot of pecans as could be desired, these easily bringing from 25 to 65 cents per pound in any market, and there is always a big demand for them. On his farm which is a side issue, is to be seen one medium sized tree that will produce 140 pounds of pecans this year and another that will easily yield a return of 145 pounds; also a considerable additional acreage that has been budded which will come into bearing within the next year or so. Some of these trees were budded five years ago and have nice crops this year, all of the paper shell variety of fine flavor and up to the standard in meat yielding quality.—Valdosta, Ga., Times.

1000 Pounds Per Acre in 13 Years

J. R. Pinson, Baconton, Ga., is a farmer engaged in just the old-fashioned sort of farming that has been going on in that section for many a year, except that Mr. Pinson has "kept up with the procession" by adopting modern methods of crop rotation, intensive cultivation, etc.

Among other things planted on his farm is a grove of 13 acres of pecan trees. These he planted 13 years ago. This season they yielded 13,000 pounds of nuts bringing in nearly \$6,000. The older trees from which the bulk of this season's crop was gathered were planted on old "wash" land—land from which much of surface soil had been cut by erosion, and in which there were many gullies. But the trees grew and thrived, and as the years passed Mr. Pinson built up the land by planting on it various cover crops which put more fertility into the soil than they took out.

Smithwick Groves at Americus, Ga.

Six hundred dollars per acre in crop yield is the net return claimed by Henry W. Smithwick, Americus pecan grower, for the season, says a despatch from Americus, Ga. This return is claimed for five acres of Mr. Smithwick's place, which embraces altogether about 80 acres. The land when purchased originally was worth approximately \$20 an acre. Mr. Smithwick's crop this year for the five prize acres will average about 1,200 pounds to the acre, the average price per pound being 50 cents.

Cultivation and care of the trees, including fertilization and harvesting, cost Mr. Smithwick approximately \$30 per acre, and to this taxes, etc., add another \$5 per acre, leaving a return of \$565 per acre earned this year. Mr. Smithwick's entire place is planted to pecans, although many of his trees are young and not yet in full bearing condition.

Ware County, Ga., For Pecans

In offering for sale his 450-acre pecan land at Walerstown, Ga., Senator Bowden, Waycross, Ga., said: "Ware county soil, according to analysis and experiments, is as fine as any in the world for the cultivation of the paper shell pecan, and as the result of a big advertising campaign that I will put on in connection with the sale of my grove I expect to advertise this section as a paper shell pecan growing community to the outside world."

Jason Scarboro, postmaster at Tifton, Ga., has harvested 3,000 pounds of pecans from a five-acre grove on his Cycloneta farm this season, has sold them, disposing of 2,000 pounds to one firm in Chattanooga, which wanted 4,000 pounds. Satisfactory prices were received for the nuts sold.

C. L. Whitney, formerly of Ohio, has sold his 100-acre pecan farm, two miles from Thomasville, Ga., to Mrs. M. L. Lively, Atlanta, Ga., for \$25,000. Seventy-five acres are in pecan trees ten years old, which bore nuts this season in excess of 1600 pounds.

You can't beat pecans for money makers, when you give them half a chance to demonstrate what they are capable of.—Albany, Ga., Herald.

PECAN EXCHANGE INDORSED

F. B. Richardson, secretary Mississippi Horticultural Society at the annual convention of which President William P. Bullard of the National Pecan Growers Exchange read the paper presented in another column of this issue, wrote to President Bullard as follows:

Your paper on "Co-operative Marketing of Pecans" was read by the president on the morning of the eighth, and brought out some very timely discussion. After the conclusion of your paper, the president made the following statement: "I might say as a sort of supplement to this excellent paper that it certainly appeals to my sense of reason, and it is bound to appeal to everybody's sense of reason. The thing we have to consider is how is the quickest way we can get into the national fold, according to his paper."

To me, it appears that the Pecan Exchange is the salvation of the commercial pecan growers. It is only a question of a short time, in my opinion, until you will have the majority of commercial growers taking advantage of its opportunities.

Pecan Grove at Auction

Waycross, Ga., Dec 28—One of the largest and most valuable pecan groves in Ware county will be sold at auction during the month of January. Four hundred and fifty acres of trees, many of them bearing, will be divided into 45-acre tracts, and sold to the highest bidder. The ground is located at Walerstown and has a wide frontage upon the Saltilla River. The present owner, Representative J. E. T. Bowden, of Waycross, intends to conduct an extensive advertising campaign throughout the South and West, in which he expects to point out the advantages of the soil of Ware county for the production of paper shell pecans. It is believed that the campaign will aid in the work of the Chamber of Commerce, which is attempting to attract the pecan interests of the South to Ware county.

G. W. Fliror Wins Prize—The Macon, Ga., News, says of W. H. Doughty's farm near Louisville, Ga.: "It will yield something like 10,000 pounds this year which will get a good price because of their excellent flavor and variety. G. W. Fliror, who is the manager of this grove, has been attending the State Fair in Macon this week, where he put on exhibition a display of nuts grown in Dr. Doughty's orchard. Mr. Fliror won second prize with these pecans, which is considered quite a compliment when it is remembered that he went up against some of the oldest growers in the state in the pecan culture."

The opportunities which pecan growing offers to investors, whether on a large or small scale, are being effectively and extensively advertised, says the Albany, Ga., Herald. In magazines, in attractively illustrated pamphlets, or movie screen and in various other ways are the proved possibilities of pecan growing for profit being presented to those to whom the matter is calculated to appeal. Albany is widely known as the city in the heart of the pecan territory, and there's no way of calculating the value of the advertising which the city and section surrounding it have received and will continue to receive.

Cordele, Ga., pecan growers are calling for establishment of a pecan exchange there. We presume they mean a branch of the National Pecan Exchange whose headquarters is at Albany, Ga. The way is easy.

A negro farmer sold to an Albany, Ga., wholesale pecan dealer last year pecans from eight trees for \$235; this season the crop from those trees was considerably larger.

At present the only quotations of pecans on the New York market are: Mexican, 18c to 19c; extra large, 23c; jumbo, 10½c. Not a single quotation has ever appeared in that general market, on paper-shell improved pecans. There are not enough of them.

Many pecan trees are being planted in Crisp County, Ga., this winter.

OKLAHOMA

Still "Hunting" Pecans in Oklahoma—Along almost every small stream in northeastern Oklahoma one can find pecan trees, especially in Tulsa, Creek, Osage and Washington counties. Buyers on a wholesale basis are paying 10 cents a pound for the larger sizes and less for those undersized or mixed. The Deep Forks farm, near Bristow, is said to produce from \$3,000 to \$6,000 worth of nuts annually. The construction of improved roads throughout northeastern Oklahoma has induced hundreds of residents of the towns and cities to go pecan hunting. Many make a day of the trip, finding that the accumulation of nuts they procure is worth the effort.

Pecans and mistletoe gathering gave profitable occupation to many rural residents of Oklahoma during the fall and early winter.

An exhibit of Oklahoma pecans was made at the horticultural show of the A. & M. College, in Stillwater, Okla.

Eight carloads of pecans were shipped this season from Byers, Cotton Co., Okla.

The pecan crop in the Nuyaka, Okla., section this season brought in \$39,600.

LOUISIANA

Big Demand for Louisiana Pecans

Monroe, La., Dec. 10.—The pecan crop in North Louisiana is much larger this year than it has been for a number of years and the demand is greater than known in the history of the industry, according to leading buyers who have been in this part of the state for some time.

C. R. Beauchamp, of Philadelphia, who has been buying pecans for several weeks, has negotiated for 100,000 pounds of the nuts in Northeast Louisiana and states that there are probably more than that amount that will be sold to other buyers within a few days, or have already been sold. Louis Stockner, also buying for eastern concerns, is reported to have secured more than 100,000 pounds in East Carroll parish and other buyers scattered through the various parishes of North Louisiana, where the pecans are on the market, are making big purchases, the largest ever known.

Buyers are paying about seven cents a pound for them. Growers state that the pecan industry, so far as this part of the state is concerned at least, is now ranking with the largest money-making crops known here. The industry has jumped from the sale of a few hundred pounds, or a few thousand pounds, annually to hundreds of thousands of pounds in the last few years.

Pecans for Europe

New Orleans, La., Dec. 28.—What is believed to be the first foreign shipment of Louisiana pecans was made recently by the Joseph Samuel Company, New Orleans pecan shellers, when a ton of picked pecans was forwarded to points in Germany, Italy and France. The shipment was packed in barrels of 200 pounds each and was sent direct by steamer from this port.

The highways of Concordia parish, Louisiana, will soon be planted with pecan trees which will not only furnish shade and shelter to travelers, but will one day provide nuts enough to more than pay for the upkeep of the roads, if the plans of C. P. Scab, farm agent are carried out.

A pecan tree on the farm of James Marks Scott, near Mt. Meigs, Ala., 100 years old, bore 600 pounds of nuts this season.

If it relates to nut culture it should be in the AMERICAN NUT JOURNAL. Please send it in.

"IMPROVED METHOD OF WALNUT GRAFTING"

Endorsed by Luther Rurbank as the Best.

Price: \$1.00 Postpaid.

C. R. BIEDERMAN, HEREFORD, ARIZONA

THE PECAN

TEXAS

Top-working 4000 Acres Pecans

Growing of pecans on a scientific scale is being extensively undertaken on the Hogg ranch at Columbia, Texas, under the direction of Harvey C. Stiles, director of horticulture for the Cinco Encinos properties and also director of the development work of tree conservation of the Hogg properties in that section.

The work being done by Mr. Stiles, who is widely known in horticultural circles in the South, will prove of great value to those who make a business of growing pecans for the market. He is continually bending his energies to improve the quality of pecans and to increase their size.

The Houston, Tex., Post recently published an illustrated account of the work at the Hogg ranch in which it said:

Mr. Stiles is an enthusiast on the cultivation of pecans. On the Cinco Encinos properties, located on the east bank of the Brazos river, opposite the old and historic town of Columbia, he is engaged in using small, hard shelled fruit as stock to graft to the soft shell varieties. "By this grafting process we can bring these trees into bearing in two years' time, and in six or eight years can bring a tree in such a productive condition that would ordinarily require 15 or 20 years if young trees were planted," Mr. Stiles said.

Development work of this sort is being done on 4000 acres of land on this property. Mr. Stiles described the nature of the work as top working, done by grafting and budding. Already 2,000 acres are in pecan trees on which this work is in progress. Mr. Stiles showed members of the party large, fine looking pecans that indicated he was working along proper lines.

He pointed out pecan trees, five feet across the top, that had reached that growth since the grafts were inserted in the trees last June. He said that as a result of this grafting process a tree, after a year's growth, is easily worth \$100.

Pecans Beat Cotton

Pecan buyers of Stroud, Tex., have shipped out more than twenty carloads of pecans this season, with the harvest practically completed. Estimating this crop at 12 cents a pound, average price to the farmer, and 30,000 pounds in each carload, the value is \$72,000. Since this is all net profit to the farmer, it greatly outshines the cotton crop as a real revenue-producer, they say.

Pecans Worth \$4000 Per Car

Smithville, Texas, Dec. 8.—Approximately 15 cars of pecans will be shipped from this county this season, averaging about \$4,000 per car. Up to about two weeks ago the price was very unsatisfactory but a slump in the market has caused a great many to hold.

L. J. Housman of the Cotton Belt Line, says: "When a comparatively small territory of Texas can dispose of \$1,000,000 worth of such products as pecans and turkeys, which are some of the country's side issues, it is not in such bad shape."

Dr. A. Caswell Ellis' Avocation

Austin, Tex., Dec. 24.—"It is my belief that we have twenty million pecan trees in Texas, which, as soon as they are properly grafted and budded, will make more clear money than the cotton crop," said A. C. Ellis, well known professor, in the University of Texas, in discussing the possibilities of pecan grafting. Some years ago Dr. Ellis became interested in the production of fine pecans. He introduced a method of grafting by which he proved that the large papershell pecans of the Gulf Coast could be successfully produced in the pecan belt of central west Texas.

Dr. Ellis presented his new process before the Farmers' Institute which convened in Austin a few years ago, and used some pecan trees on the campus for illustration. By top-grafting worthless native trees which bore every three years a quality of nuts worth ten cents a pound, Dr. Ellis made them take on a variety which bears pecans worth from fifty cents to a dollar a pound. The length of time it takes for the trees to make a satisfactory growth depends upon the variety of the tree, it is stated, but it usually takes about three or four years to get the best results.

"The financial results of pecan grafting are enormous," Dr. Ellis said. "The supply is never so great as the demand, and the cost of production is slight in comparison with the large returns. While the people of Texas know of these possibilities, too few are taking advantage of them. The work is not being taken up as rapidly as it should be, because pecan growing has been almost entirely a side issue."

Dr. Ellis says that pecan raising is his avocation, as well as the means of establishing economic independence. Instead of spending his holidays in hunting and fishing he uses his spare time working with the pecan trees on his farm.

Selling on the Square is Lawful

Waco, Tex., Dec. 5.—The case of Clyde Anderson arrested by Policeman Ludwick for selling a sack of pecans on the square, was dismissed by City Judge R. H. Kingsbury, the court ruling that there was no ordinance against selling pecans. Officer Ludwick acted under instruction to arrest any person selling anything on the square except cotton, hay, wood and corn.

The pecan yield at Yoakum, Texas, and the price last fall has put a value on the pecan bottoms along the Guadalupe river, which are now attracting attention as an investment. One farmer there is reported to have refused flatly an offer of \$1,000 for one of his trees.

Early in December the San Saba Pecan Company, San Saba, Tex., sent a sack of pecans to President Harding, with a letter informing him that they came from a tree more than 200 years old, according to most reliable computation.

Cuero Pecans Abroad—By the shipment of pecans to Europe, the fame of the Guadalupe Valley, Texas, has spread afar.

At Gonzales, Tex., the price of pecans on Dec. 1st dropped from 13 and 15 cents to 10½ and 11 cents.

Heavy shipments of pecans were made this season from Pascagoula, Miss., one concern shipping 3500 pounds in a single day.

Just mention AMERICAN NUT JOURNAL

FLORIDA

First Carload from Monticello, Fla.

With a headline half-way across the front page and a large picture showing a freight train carrying a carload of Jefferson county pecans, the Monticello News brags some about the way these favorite nuts are bringing fame and fortune to Jefferson county nut growers. The first solid carload ever sent from Monticello of pecans was well worthy the space given, says the Jacksonville Times, and the fact that Florida is showing its wonders and possibilities in this direction is noticeable. Telling of the shipment and mentioning the fact that it was a St. Louis firm, the News adds: "The pecan business has now reached a stage when it cannot fail to be recognized. When shipments go forth in carload lots the world will be obliged to sit up and take notice. The carload is only a small part of the nuts raised in the county this season, the total of which will probably reach several hundred thousand pounds."

In another column the Monticello News tells of the intention of a well known planter of that section to plant a fifty-acre pecan grove this winter. It will be set out in young trees during the next few months, on D. H. Gilbert's farm, just west of Monticello.

ALABAMA

2,000 Pounds from 50 Trees—The farm near Selma, Ala., which Frank Block, a Louisville & Nashville R. R. conductor bought a few years ago had a few seeding trees which Mr. Block top-worked to Success pecans. This season Captain Block gathered about 2,000 pounds of nuts from about fifty trees. The nuts are of the highest grade, and will bring about 60 cents a pound in the eastern markets.

Worth Their Weight In Dollars—The police of Mobile, Ala., have recovered 1000 pounds of pecans valued at \$1000 stolen from the warehouse of an orchardist in the southern end of the county and which were intended for shipment for the Chicago market.

Just mention AMERICAN NUT JOURNAL

A NEW BOOK! NUT GROWING By Robert T. Morris

The latest and only up to date book on the newest and one of the most important branches of Horticulture, giving a broad survey of a rapidly growing industry. Detailed explanation of successful methods of propagation and the new process of grafting with the use of paraffin; illustrated.

An invaluable work for all nut growers.

Price. \$2.65, Postpaid

AMERICAN FRUITS PUB'G. COMPANY
39 State Street, Rochester, N. Y.

BUDDED and GRAFTED Nut Trees

Start right with my hardy Pennsylvania grown trees and be assured of success.
Attractive Catalogue Free.

I have this season a fine lot of stake trained Pecan, English Walnut, Black Walnut and Persimmon trees budded on root pruned transplanted stocks, that will please you and that will transplant easily and safely. Write for catalogue.

J. F. JONES, The Nut Specialist
LANCASTER, PA.



NEW EDITION FREE

A practical guide showing how to bud pecans. Tells how to grow trees 12 inches in diameter by the end of the 8th year, which yielded 400 lbs. nuts per acre.

Trees, Nuts, Groves for sale direct without agent at attractive reduced prices

B. W. STONE, Thomasville, Ga.

An Unexcelled Medium

FOR ALL NUT ADVERTISING

The "American Nut Journal" is the only national publication devoted to Nut Culture in all its phases. It circulates throughout this country and abroad.

Advtg. Rate: 20c per line, \$2.50 per inch

American Fruits Publishing Co., Inc.
39 State St., Rochester, N. Y.

Alabama Growers Organize

The Central Alabama Pecan Growers Association was organized at Selma, Ala., January 4th with the following officers:

President, C. Kirkpatrick; vice-president, George R. Beers. Board of Directors: C. Kirkpatrick, G. R. Beers, H. C. Armstrong, Julien Smith, Dr. T. E. Lockhart, J. G. Wilkins, J. E. Dunaway.

The purpose of this association is to extend pecan production throughout this territory; to provide facilities for grading and marketing the crop; to safeguard the membership by creating better trade opportunities; to promote closer relations between its members, and to stimulate greater activity among them in the cultivation and propagation of a uniform and superior quality of pecans. While no definite action has been taken as to the best course for placing the pecan upon the market, the prevailing opinion favors affiliation with the National Pecan Growers Association through its Exchange at Albany, Ga., provided satisfactory arrangements can be made.

The territory of this association includes that part of the state which at one time was the greatest cotton producing section of the South, and the officers and members of the Association are numbered among the largest land-owners in the state, including the most prominent business men and bankers of this district. For a number of years considerable acreage has been planted to the budded pecan, the yields of which for the past year mounted into the hundreds of thousands of pounds, and it is in recognition of the value of co-operative effort in placing a tonnage of this sort upon the market, that this organization came into being. The details are to be worked out during the coming spring.

In Southern Alabama

T. H. Moulton, of Birmingham, who has a residence at Fairhope, Baldwin county, in Southern Alabama, writing from the latter place says:

"This is the season when the people of Baldwin County are busy gathering their crops of pecans. The crops are very short this year, due to the longest dry weather ever experienced in this section of the state. The greater injury has been to oranges. About 25 years ago the coming into this county of educated people, started the intelligent culture of what is known as paper shell pecans. A. M. Troyer, who runs quite a large Nursery, and who has many acres in pecans and oranges, thinks the Schley variety superior to all others. I understand that he is so firmly of this opinion that he has ceased to bud or graft any other variety.

"E. B. Gaston, of Fairhope, secretary of the Single Tax Colony, has this year gathered 160 pounds, and estimates about 20 pounds more to be gathered from one tree in his backyard. The postmaster told me that he had one tree in his backyard from

PECAN PRODUCTION, 1921, WITH COMPARISONS

State	Percent of a full crop			Proportion of nuts that are improved varieties. ¹	Quality of nuts		Price per pound being sold to outside markets		Percent of crop being sold to outside markets
	1921	1920	1915 to 1919		1921	1920	Improved	Seedling and wild	
	P. ct.	P. ct.	P. ct.		P. ct.	P. ct.	P. ct.	Cts.	P. ct.
North Carolina	32	35	55	35	85	91	48	22	2
South Carolina	81	33	76	50	83	82	38	22	10
Georgia	70	31	81	78	82	82	49	18	70
Florida	68	32	76	43	86	92	45	19	70
Alabama	29	58	51	..	70	53
Mississippi	75	15	70	62	86	71	42	20	47
Louisiana	75	13	66	12	88	86	38	15	53
Texas	45	8	55	(2)	81	70	32	13	57
Oklahoma	47	15	59	(2)	85	84	22	12	45
Arkansas	70	17	65	(2)	85	..	47	13	60
Missouri	20	14	36	1	88	80	25	14	70
Illinois	39	50	35	0	85	85	..	16	32
Indiana	15	70	50	0	90	90	..	20	15
Kentucky	50	26	48	(2)	91	91	..	16	26
United States	52.2	16.1	59.2	14.5	82.9	76.4	34.2	14.5	54.9

¹ Less than 1 per cent.

² Reported in 1920.

which he gathered last year 125 pounds of the Stuart variety.

"There are thousands of acres set out in this county and many beautiful orchards are in and around Fairhope. The largest acreage I have seen is at Magnolia Springs, owned by a Chicago gentleman, who has a beautiful residence surrounded by most beautiful and ornamental trees and flowers at Magnolia Springs. Magnolia Springs is situated on Magnolia River, a branch of Fish River, and the scenes on these rivers are indeed picturesque.

"One has to wait so long for a pecan orchard to become profitable that many are planting orchards mixed with pecans and Satsuma oranges. The oranges begin to produce profitable crops in four or five years and until the pecan trees become very large they do not interfere with the orange trees and vice versa. Then, when the pecan trees become old and very profitable, the oranges can be cut out and the pecans produce crops that will pay enormous income per acre. All orchards are planted out checkerboard fashion. The distance between pecan trees varies from 40 to 60 feet, the distance between Satsuma orange trees varies from 15 to 20 feet.

"One can make his own calculation as to how profitable a pecan grove may be at the age of 25 years, figuring 100 pounds per tree and 20 trees per acre, making 2,000 pounds per acre, at 50 cents per pound, thus yielding \$1,000 per acre. For the last few years the best varieties of pecans have not sold at \$1 per pound. This year they are bringing from 50 cents to \$1 per pound."

Just mention AMERICAN NUT JOURNAL.

THE ALMOND

Almond Tariff Question

Discussing the proposed almond tariff of a five and fifteen cent schedule, T. C. Tucker, manager of the California Almond Growers Exchange said recently: Recently a group of sixteen western senators agreed to make a fight for the five and fifteen schedule before the Senate finance committee and on the floor of the Senate if necessary. These senators constitute a powerful group in the Senate. All of them, save Senators Johnson and Shortridge, represent states where the almond tree is unknown. It is a significant thing that the plain fairness of the California almond growers plea enlisted the unqualified support of these senators."

Prof. Jaffa's Defense

Oakland, Cal., Dec. 4.—California Almond Growers have telegraphed members of the Senate finance committee framing the permanent tariff bill, calling their attention to a report by Prof. Jaffa of the University of California on the comparative values of foreign and California grown almonds.

This was the answer of the state's almond farmers through their Exchange to charges of Walter C. Hughes of the National Confectioners' association that the American grown almond was inferior.

Mr. Hughes appeared before the finance committee in Washington representing one of the most powerful groups in a combination of manufacturers, importers and dealers, who are fighting the claims of California almond growers for tariff schedule on almonds adequate to save the industry in this country from gradual disintegration threatened by the flood of cheap, peasant-grown almonds from Southern Europe.

Nut Culture Information

Reprint folders on topics discussed in American Nut Journal. 10 Cents Each

Grafting and Budding the Walnut—U. S. Dept. Agriculture.
Pecan Areas of the United States—W. P. Reed.
Walnut Trees For New England—Dr. Robert T. Morris.
Some Walnut Varieties—Dr. L. D. Batchelor.
Chip Buds For Nut Trees—Charles L. Edwards.
Grafting, Budding, Topworking—Dr. W. C. Deming.
Breeding Chestnuts for Disease Control—U. S. Dept. Agr.
Advent of Nuts as Staple Food—Dr. J. H. Kellogg.
Pecans As An Investment—Herman C. Locke.
Underworking Nut Trees—Charles L. Edwards.
The Ubiquitous Black Walnut—T. P. Littlepage.
Average Yield of Pecan Orchard in S. W. Georgia.
Value of Nuts As Food—Dr. W. C. Deming.
Improved Black Walnut a Good Investment—Henry Stabler.
Status of Pecan Industry—C. A. Reed, U. S. Nut Culturist.
Grafting Tardy Walnut Trees—Judge Charles L. McNary.
Pecan Varieties for the South—C. A. Simpson.

Sources of Supply of Hazel Nuts—Bulletin Imperial Institute.

Top-Grafting the Walnut Tree—Ferd Gröner.

Black Walnut As a Meat Producer—Henry Stabler.

Outline of Northern Nut Culture Activity—Dr. W. C. Deming.

Establishing the Filbert Grove—George Dorris.

Top-Working Northern Pecan Trees—J. F. Wilkinson.

Nut Trees for Highways and Public Places—W. S. Linton.

American Nut Culture—24-page Pamphlet Survey.

East Texans Reap Fortunes on Pecans.

Hazel Blight—Dr. Robert T. Morris.

American Nut Industry—C. A. Reed, Nut Culturist.

What Nuts to Plant in Northern States.

Pecan Rosette; Practical Treatment—W. A. Weaver.

Fine Varieties Northern Nut Trees Ready to Plant—W. G. Bixby.

Nut Tree Grafting by an Easy Method—Dr. Robert T. Morris.

Purchase of Chestnut Tree With Reference to Blight—G. F. Gravatt.

Quick Results in Pollenizing Pecans—E. E. Rispen.

Nut Trees to Reduce Food Costs—Chas. Lathrop Pack.

AMERICAN FRUITS PUBLISHING CO., 39 State Street, Rochester, N. Y.

American Fruits Company's Library Opportunities

PRACTICAL BOOKS ON HORTICULTURE, NUT GROWING, NURSERY PRACTICE

Any of the following books will be sent on receipt of price by AMERICAN FRUITS PUB'G CO.,
123-125 Ellwanger & Barry Bldg., ROCHESTER, N. Y. Prices subject to change.

American Apple Orchard By F. A. Waugh.....	\$1.90	Insect Book—Dr. L. O. Howard... 6.30	Parsons on the Rose—Parsons..... 1.75
American Fruit Cultivist By John J. Thomas.....	3.65	Insects and Insecticides—Weed.... 2.15	Peach Culture—J. A. Fulton..... 1.65
American Fruit Farm—F. N. Thorpe	2.65	Insect Pests of Farm, Orchard and Garden—Sanderson and Pears.. 4.65	Peach Growing—By H. P. Gould... 2.65
American Grape Culture—Munson.. 2.65		Irrigation Farming—L. M. Wilcox. 2.40	Pear Culture for Profit—Quinn.... 1.35
American Grape Growing and Wine Making—George Husmann 2.15		Irrigation for the Orchard—Stewart 1.75	Picturesque Gardens—Henderson.. 2.25
American Horticultural Manual By Budd-Hansen, two vols.....	3.15	Land Drainage—Joseph H. Jeffrey 2.15	Plant Breeding—By Dr. L. H. Bailey 3.40
American Peach Orchard—Waugh. 1.90		Landscape Gardening—Art of Landscape Architecture—Parsons... 3.65	Plant Propagation: Greenhouse and Nursery Practice—M. G. Kains 2.40
Bulbs and Tuberous-Rooted Plants. 2.15		Landscape Gardening—Downing's Famous Work—10th Edition—Revised by Waugh..... 6.00	Plant Physiology—B. M. Duggar... 3.00
Bush Fruits—By F. W. Card..... 3.15		Landscape Gardening—House and Garden's Book of Gardens, 9 1/2 x 12 1/2, 400 Illustrations..... 5.15	Practical Forestry—A. S. Fuller... 2.15
California Fruits and How to Grow Them—E. J. Wickson, A. M.... 4.15		Landscape Gardening—Kemp—Revised by F. A. Waugh..... 2.15	Practical Fruit Grower—Maynard.. 1.00
Citrus Fruits—J. E. Colt..... 3.40		Landscape Gardening—Maynard.. 2.65	Principles of Agriculture—Bailey.. 2.00
Commercial Apple Industry of North America	3.65	Landscape Gardening—The Small Place—By Elsa Rehmann..... 3.65	Productive Orchard—F. C. Sears 2.65
Cyclopedia of Agriculture By E. V. Wilcox-C. B. Smith... 3.75		Landscape Gardening—Cridland... 2.65	Principles of Fruit Growing—Bailey 2.65
Dwarf Fruit Trees—Waugh..... 1.00		Landscape Gardening—The Complete Garden—Albert D. Taylor. 6.15	Principles of Pruning—Kains 2.65
Farm Bureau Movement—O. M. Kile 2.15		Landscape Gardening—O. C. Simonds	Pruning Manual—By L. H. Bailey. 2.65
Fertilizers and Crops By Dr. L. L. Van Slyke..... 3.40		Manual American Grape Growing—Hedrick	Putnam's Garden Hand Book..... 2.00
Fertilizers—Edward B. Voorhees... 2.65		Making Horticulture Pay—Kains... 1.90	Quince Culture—W. W. Meech.... 1.35
Field Notes on Apple Culture By Dr. L. H. Bailey.....	.90	Manual of Fruit Diseases L. R. Hessler, H. H. Whetzel.. 3.15	Roses—How To Grow—Robert Pyie 1.35
First Principles of Soil Fertility By Alfred Vivian.....	1.50	Manual of Fruit Insects M. V. Slingerland, C. R. Crosby 3.90	Rose—H. B. Ellwanger..... 1.40
Forcing Book—By Dr. L. H. Bailey... 2.15		Manual of Gardening—L. H. Bailey 3.40	Sales Promotion By Mail..... 2.15
Fruit Growing in Arid Regions.... 2.75		Manual of Tree Diseases—Rankin. 3.40	Small Fruit Cultivist—A. S. Fuller. 1.75
Fruit Garden—P. Barry..... 2.15		Manual of Vegetable Garden Insects By Crosby & Leonard..... 2.90	Soils—E. W. Hilgard..... 4.25
Fruit Harvesting, Marketing—Waugh 1.90		Manures and Fertilizers—Wheeler. 2.65	Soils—Lyon-Fippin-Buckman 3.40
Fruit Insects—Crosby..... 3.90		Modern Fruit Marketing—Brown... 1.90	Soils—F. H. King..... 2.40
Fumigation Methods	1.90	Modern Propagation Tree Fruits—B. S. Brown..... 1.65	Soils—By Charles W. Burkett..... 1.90
Gardening for Pleasure—Henderson 2.15		Nature's Garden—Neltje Blanchan 6.30	Spraying Crops—C. M. Weed..... 1.00
Gardening for Profit—Henderson... 2.15		Nursery Manual—Dr. L. H. Bailey. 2.65	Standard Cyclopedia of Horticulture
Grape Growers Guide—Chorlton... 1.65		Natural Style Landscaping—Waugh 2.65	Edited by L. H. Bailey. In six volumes. 3,600 pages. 4,000 text engravings. 96 sepia half-tones. 500 collaborators. May be had on installment payments 48.00
Grape Cultivist—A. S. Fuller..... 2.15		Manual Tropical and Sub-tropical Fruits—Popenoe	Strawberry in North America—S. W. Fletcher
Greenhouse Construction—Taft ... 2.40		Nut Cultivist—Andrew S. Fuller... 2.15	Strawberry Growing—S. W. Fletcher 2.40
Greenhouse Management—Taft..... 2.40		Nut Growing: Latest Information; Guide to Propagating—By Robert T. Morris	Success in the Suburbs—John R. McMahon
Hedges, Windbreaks, Shelters.... 1.00		Ornamental Gardening—E. A. Long 2.15	Successful Fruit Culture By Samuel T. Maynard..... 1.75
How To Grow Roses—Robert Pyle. 1.35		Principles of Floriculture..... 3.40	Surgeon's Philosophy—Dr. R. T. Morris
Injurious Insects—F. L. Washburn 2.65			Systematic Pomology—Waugh.... 1.90
Insects of Economic Importance—Herrick	2.15		Ten Acres Enough—I. P. Roberts.. 1.75

A paper which gives the best value for the money to the reader will give the best value to the advertiser as well. I don't think there is any argument about the soundness of this view.—H. Dumont, Chicago, Ill., in Printer's Ink.

NUT TREES TOPWORKED

Inspections and Consultations in Northern Nut Culture

Dr. W. C. Deming Georgetown, Conn.

HARDY NORTHERN NUT TREES

Best varieties, grown in natural nut soil. Send for catalog. Have your seedling nut trees topworked to these fine varieties.

Information and estimate on request.

INDIANA NUT NURSERY

Rockport, J. F. Wilkinson, Prop. Indiana

GRAFTED PECAN TREES

ALSO BUDDED ROSES and SATSUMAS

We Solicit Your Inquiries

Carol Plantation Nurseries, THEODORE, ALA.

Texas Pecan Nursery

Arp, Texas

THE PEOPLE THAT GROW WELL-ROOTED PECAN TREES

THIS SPACE

\$2.50 Per Month Under yearly Contract

Under less than yearly time:

\$2.80 Per Month

HALES HICKORY

Grafts obtained direct from original tree, are on Northern pecan roots. Have pecan trees also.

SIMPSON NURSERY CO., MONTICELLO, FLA.

"IMPROVED METHOD OF WALNUT GRAFTING"

Endorsed by Luther Burbank as the Best.

Price: \$1.00 Postpaid.

C. R. BIEDERMAN, HEREFORD, ARIZONA

SUCCESS

and other leading varieties. Also citrus

BECHTEL PECAN NURSERIES

Ocean Springs, Miss.

PECAN TREES

Plant them this year! Buy direct from nursery and save agent's profit. All standard varieties; quality and service the best. Write us for prices.

FLORIDA NURSERIES

W. W. Bassett, Prop., Monticello Fla.

AMERICAN NUT JOURNAL CHIEF EXPONENT OF AMERICAN NUT INDUSTRY

Of National Circulation

Covering Every Phase of Nut Culture

Subscription:
Advertising:

-
-

\$2.00 Per Year
\$2.80 Per Inch

Official Journal {

National Nut Growers Association
Northern Nut Growers Association

AMERICAN FRUITS PUBLISHING COMPANY

39 State Street, Rochester, N. Y.

American Nut Journal

**DEVOTED TO NUT GROWING INTERESTS
GENERALLY THROUGHOUT THE AMERICAS**

Vol. XVI, No. 3

MARCH, 1922

Per Copy 20c.



NINE YEAR OLD DU CHILLY FILBERT TREE

In Orchard of George Dorris, Springfield, Ore., Largest Filbert Orchard In United States. Thirty Pounds of Nuts Per Tree, This Age. See Page 33.

39 STATE ST.



ROCHESTER, N. Y.

American Fruits Publishing Co.

SEEDLING PECANS VS. NAMED VARIETIES

By J. H. Burkett, Clyde, Tex., at Convention of Southern Agricultural Workers, Atlanta, Ga., February 21, 1922.

In discussing the subject assigned me in order that those participating in this convention may understand the full import of what I have to say, it will, perhaps, be proper for me to give you a brief history of pecan production and its development in Texas.

Up until within the past twenty years there has been but very little attention paid to the pecan crop. Since the commercial cracking machines have come into use and shelling plants have been established, our pecans have advanced in price from two cents to twelve cents per pound.

The time was, up to twenty or thirty years ago, that many of our native pecan forests fell before the woodman's axe to make room for more cotton and corn. Thousands of acres of these extensive pecan groves have been destroyed and yet in spite of this ruthless destruction the Texas native pecan forests produced in 1919 a crop of some 800 car loads weighing 30,000 pounds each. This was an unusually large pecan crop for Texas. It is thought that probably 450 to 500 cars is an average annual yield. It is also believed that the Texas seedling crop of pecans constitutes more than 60 per cent of the entire production of the United States. If this be true, then it can readily be understood that my subject, "Seedling against the named varieties" is in fact literally true, for as long as the Texas seedling pecan crop continues to be the majority of pecan products that enter the Nation's markets, the value of the named varieties will be sensitive to the major seedling production and the seedling production a controlling factor in the market value of the named sorts. In this connection it should be understood that the seedling crop of the several states that produce pecans from the native groves, to wit: Texas, Oklahoma, Arkansas, Louisiana, Florida, Alabama, Mississippi, Missouri, Kentucky, Illinois and Indiana contributing to the Nation's output; as the merits of the pecan nut becomes better known, and machinery for the shelling of these native nuts becomes more perfect, the seedling pecan will more and more become a competitor in our markets against the "named varieties."

As the named varieties become more abundant by reason of the increased acreage which is being augmented each year, the difference in the market price of the two grades, seedling and the named sorts will approach more nearly a parity in value on the markets of our nation, for, let it be understood, that there are now growing in Texas numerous native Texas varieties are culled and pooled of the named varieties which grow in cultivated orchards in Georgia, Mississippi, Florida, Louisiana and Alabama. When these native Texas varieties are culled and pooled into uniform grades and placed on the markets as super-grade Texas seedlings, the markets which are using the named varieties will feel the effect, and the difference between the seedlings and named varieties will become less.

There is a sympathetic trend on all of our markets of the various species of nuts; the English (Persian) walnut, almond, Brazil nut, black walnut and other nuts, including the native hickory nut, respond to the influence of the market value of the Texas seedling. When the Texas native pecan crop is abnormally abundant and the price is low, all of these other nuts, including the named varieties are affected, as was the case in 1919. That year the California walnut growers received an exceptionally good price for their walnuts, but as the Texas

seedling harvest advanced and the product was put on the markets in liberal quantities and cheap prices, English walnuts failed to appeal to the purse and appetite of the consumer and there were left unsold in the hands of the retail merchants numerous carloads of these walnuts. Had it not been for the liberal supply of seedling pecans which were dumped on our markets the walnuts would have been easily disposed of at a profit to the merchants rather than at a loss.

This discussion of "Seedlings vs. named Varieties" as applied to pecans would fail of its purpose if it did not call attention to the present conditions confronting those who have invested money and time in developing orchards, and after several years waiting for returns, discover that their product is forced to enter the channels of trade in competition with the seedling product, not only for the several states producing them, but that the named varieties are forced to compete with importations from Old Mexico with constantly increasing volume. It is well to state, however, that the demand for pecans both seedlings and named varieties is increasing rapidly, and will increase more and more as the merits of the pecan become better known, that it is not likely that production can keep pace with the demand for many years to come. But a warning is here sounded that the majority of all seedling nuts entering the channels of trade is as yet a free lance, against not only the named varieties of pecans, but all other like commodities produced because the seedling pecan industry is yet unorganized. Producers of named varieties and of walnuts and almonds are vitally interested in seeing that producers of seedling pecans are efficiently and systematically organized in order that their product may enter the markets in an orderly businesslike way, for until this is done the seedling product will remain a menacing factor in unbalancing the trade trend of the other products, even if they be ever so efficiently organized.

Under the encouragement of the Texas State Department of Agriculture an effort has been made for the past few years to organize the growers of the state with a view of standardizing the seedling classes and stabilizing the market, stabilizing the market, accordingly, there has been chartered in our state the Texas Pecan Growers Exchange. This Exchange under the efficient management of Mr. C. D. Jarratt of San Antonio has had one season's experience and Mr. Jarratt assures us that prospects are very favorable for the exchange to become a predominating factor in the orderly marketing of our seedling pecans, and the recommendation is here made that every important pecan growing state should organize and co-operate with The Texas Pecan Growers Exchange, The National Pecan Growers Exchange, The California Walnut Growers Association and the California Almond Growers Exchange; for the purpose of stabilizing prices and encouraging the further development of these national industries.

May I suggest that your convention consider this matter and make such recommendations as in your judgment you deem expedient.

I would also further suggest that if your body decides it proper, that you go on record as favoring that investigations be made in foreign markets with a view of opening up a foreign demand for our pecan nuts. While it is true that we import more nuts to our shores than we export, for the development of our pecan industry it would, I think,

be a good business venture for us to undertake to cultivate a foreign outlet for our exclusive national nut—the pecan.

Interest In Canadian Trees

Editor American Nut Journal:

The letter from J. U. Gellatly, Gellatly B. C., Canada, who is having success with Japan walnuts, filberts and French walnuts which have grown and borne well and who is having success with pecans which have not as yet borne, is certainly interesting. I am unable to find Gellatly on the atlas that I have but from his statement that it is 100 miles north of the 49th parallel and from the facts that I gained from the atlas that it is a steamboat landing. I would assume that it is on the coast. On looking up the records of Bellingham, Washington 100 miles south and of Olympia, Washington 200 miles south I find that winter temperatures of neither one of these places go below 17 degrees F. and that at Bellingham the summer temperatures of 1914 and 1915 were 85 degrees and 87 degrees respectively and at Olympia were 86 degrees and 94 degrees respectively shows us that we have conditions here that are right for the English walnut and the filbert and the Japan walnut too. The European chestnut does well under conditions such as these. I am interested to learn that the pecan grows well there. I would not have been astonished to learn that it does not for I understand that the shagbark hickory scarcely grows at all at Santa Rosa, California. This is probably due to the lack of chilling in the winter time. I doubt if the pecan will bear with Mr. Gellatly as seemingly there is not sufficient summer heat. I have written him expressing a desire to keep in touch with him for I would certainly like to learn of his experiences. I have also made memorandum to write him on some future date. Were it not for the fact that he is on the Pacific Coast, pecans doing well at 100 miles north of the 49th parallel certainly would be a most astonishing record.

WILLARD G. BIXBY.

Comment on Current Topics

Editor American Nut Journal:

On page 22, of February issue, "Above the Forty Ninth," brings to my mind the valuable and intelligent work of the "Fruit Breeders," at the Experiment farm near Excelsior, Minn., near where Peter Gideon spent his useful life in years gone by.

It may not be generally known that they are crossing J. nigra with J. regia there, hoping to get the hardness of the Black walnut tree combined with the quality of the Persian walnut, which seems a reasonable proposition and well worth an exhaustive trial; and as this trial is in the hands of able and earnest men, I think success is reasonably certain.

I fully agree with A. Caswell Ellis, page 23, that a protective tariff is "wrong in principle." We have enough industries in our broad and dignified country to make a living from without calling on Uncle Sam, and beg for the help, which eventually comes out of the consumer. Excuse this break into politics; I apologize!

Page 26, where "50 carloads of pinon nuts" are shipped in one year from the Albuquerque district. Why, oh, why! is not a single pinon tree offered for sale east of the Rockies. Suppose they are of slow growth. The main question is: Will not some of the species make good somewhere in our East or Southeast climates and soils?

The pinon is a nice little nut and when we become adept at separating the thin shell from the meat, as are the Indians around Albuquerque, we may get a satisfying meal from them in short order by dextrous maneuver of lip and tongue.

The "Rusty Nail Method," same page, will often work all right, and so will girdling, if not overdone. Checking wood growth means a stimulus to forming fruit buds. But it does not mean additional longevity for the tree.

Farmingdale, Ill. BENJ. BUCKMAN.

Dr. L. G. Hardman is authority for the statement that the largest pecan tree in Georgia is situated on the Jackson farm, one of his places, four miles southeast of Commerce, Ga. It measures 90 feet from tip-to-tip of limbs, and is seven feet in circumference. The tree is past 70 years of age.

CONSULTING TROPICAL HORTICULTURIST and TREE EXPERT

HARVEY C. STILES

COLUMBIA, TEXAS

Specializing in Pecans, Grapefruit, Avocados, and Landscape Development. Long experienced expert for—and present active director of—many such large projects throughout tropics and semi-tropics. Examinations, Reports, Plans, Specifications and Estimates. Correspondence suggested.

AMERICAN NUT JOURNAL --- FEBRUARY, 1922

EDITORIAL DEPARTMENT—Communications on any subject connected with Nut Growing and Distribution are cordially invited by the editor; also articles on this subject. We shall be pleased to reproduce photographs of trees of interest, methods and scenes connected with the Nut Industry; portraits of individuals, etc. Suggestions are cordially welcomed.

ADVERTISING—Advertising forms close on the 10th of each month. If proofs are wanted, copy should be in hand on the 1st.

Advertising rate: 20 cents per agate line; \$2.80 per column inch for any amount of space.

Advertisements that do not represent reliable concerns will not be accepted.

SUBSCRIPTIONS—The "American Nut Journal" will be sent to any address in the United States for \$2.00 a year; to Canada or abroad for \$2.50 a year. Three years: In United States, \$5.00; Canada, \$3.50.

Add ten cents for exchange unless bank draft, express or postal money order is used.

WHAT THIS JOURNAL STANDS FOR—Reliable information on all phases of the Nut Industry. It is for the advancement of Nut Growing in general; it is in no way confined to the interest of a particular kind of nuts, nor of a particular section. It is broad in scope and absolutely independent. The aim of "The American Nut Journal" is to stimulate thousands of persons into developing interest in one of the greatest food supplies of the future—to line the roadsides and fill the waste places with trees of a sort which yield dollars worth of fruit every year instead of the mere bunches of leaves resulting from present shade and ornamental planting. At the same time it will record the progress of the industry, the latest descriptions in the note book of the biologist and plant physiologist, the rapidly expanding knowledge of methods, the increasing acreage, and in short the news as it develops of an industry whose importance is recognized by an increasing number of persons in all sections.

Entered as second-class mail matter June 6, 1914, at the post office at Rochester, N. Y., under the Act of March 3, 1879.

AMERICAN FRUITS PUBLISHING COMPANY, Inc.

Ralph T. Olcott, Editor and Manager

121-123-125 Ellwanger & Barry Bldg., Rochester, N. Y.

Classified Business Announcements In This Issue.

New Walnut Grafting..... C. R. Bneredman.....	28	"Nut Growing"	New Book	26
Bassett, W. W. Pecan Trees	28	Nut Information	Special Topics	27
Bechtel's Pecan Nurseries... Grafted Pecan Trees.....	28	Nuts as Staple Food.....	Dr. J. H. Kellogg.....	27
Carol Plantation Nurseries.. Grafted Pecan Trees.....	28	Simpson Nursery Co.....	Pecan Budwood and Trees.....	28
Florida Nurseries	Pecan Trees	Stiles, Harvey C.....	Tree Expert	18
Indiana Nut Nursery.....	Northern Pecan Trees.....	Stone, B. W.	Pecan Trees, Nuts, Groves.....	26
Inspections, Consultations ...	Dr. W. C. Deming.....	Texas Pecan Nursery	Budded Pecan Trees.....	28
Jones, J. F.	Grafted Nut Trees.....	Wilkinson, J. F.	Grafted Pecan Trees.....	28
Lancaster Nut Nurseries....	Northern Nut Trees.....	Woodson, Robert E.....	Pecan Shelling Machine.....	19

IMPORTS OF NUTS INTO THE UNITED STATES, FOR CONSUMPTION, DURING THE LAST THIRTEEN YEARS

(Compiled by Bureau of Commerce and Navigation, Department of Commerce, Especially for the "American Nut Journal.")

KIND	1907	1908	1909	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919
Almonds—not shelled.....lbs.	5,714,207	8,515,688	2,120,632	6,810,056	3,762,654	5,242,563	2,363,860	5,501,059	4,684,598	2,368,369	4,901,168	6,149,374	7,482,538
Shelled.....lbs.	8,717,952	8,556,162	8,538,054	10,495,750	12,160,636	11,692,988	12,655,057	13,896,621	12,168,153	13,210,668	19,160,258	21,544,757	28,007,908
Apricots and peach kernels lbs.				27,854	13,551	7,939	18,769	18,572	67,164	11,926	250,075		
Coconuts in the shell... Dollars	\$1,349,380	\$1,439,589	\$1,246,463	\$1,298,970	\$1,704,262	\$2,012,203	\$1,793,713	\$2,150,500	\$1,593,666	\$1,891,328	\$2,583,560	\$2,490,368	\$4,053,282
Coconut Meat broken or Copra not shredded, dessicated or prepared.....lbs.	7,064,559	14,121,576	23,742,518	20,830,539	38,081,984	61,505,787	54,283,592	44,459,158	88,680,382	108,507,765	247,043,127	430,649,332	258,637,781
Dessicated, shredded, cut or similarly prepared.....lbs.	3,476,698	5,584,652	5,461,602	5,985,308	6,961,850	5,396,465	6,826,095	9,307,924	5,866,806	7,947,380	10,491,796	20,269,909	29,637,674
Cream and Brazil.....bu.	280,633	310,418	409,644	461,496	277,679	21,601,008	11,933,139	11,431,531	12,483,319	12,489,217	16,243,025	11,282,088	43,076,368
Filberts—not shelled.....lbs.	9,960,280	8,997,246	7,365,837	10,026,961	10,084,987	8,375,860	8,586,278	10,36,072	10,922,248	10,003,552	16,468,547	7,432,524	16,747,349
Shelled.....lbs.	1,553,332	1,343,594	1,384,689	1,413,391	2,332,606	1,368,835	1,450,620	1,798,147	1,722,705	1,259,540	2,280,787	4,245,863	3,778,946
Marrons, crude.....lbs.				10,270,398	9,968,879	14,845,345	10,157,321	18,849,257	12,549,959	15,754,796	6,275,030		5,021,146
Olive nuts, ground.....Dollars	\$1,016	\$1,027	\$580	\$478	\$236	\$206	\$342	\$385	\$25	\$112	\$420		
Palm and Palm Nut Kernels "	\$3,350	\$2,250	\$2,752	\$6,907	\$5,746	\$7,906	\$4,872	23,127	31,900	1,104,885	626,435	16,905,313	5,610,056
Peanuts or Ground Beans.....													
Unshelled.....lbs.	10,432,828	6,498,202	7,326,371	11,297,172	11,055,823	12,660,433	12,140,612	17,298,778	14,075,387	9,623,411	7,710,082	1,970,797	5,667,354
Shelled.....lbs.	4,780,054	1,775,946	1,302,919	16,089,919	7,821,505	3,127,829	7,823,173	21,819,101	11,695,507	18,739,888	27,548,928	67,746,831	24,179,687
Pecans.....lbs.		1,118,071	1,480,289	3,349,460	2,333,037	2,607,227	1,803,434	2,621,161	2,032,539	1,265,382	4,076,933		
Walnuts—not shelled.....lbs.	23,036,646	21,427,853	17,432,885	23,269,974	21,146,116	22,208,845	16,363,046	16,134,211	20,988,326	22,610,418	17,177,992	3,304,003	21,235,078
Shelled.....lbs.	7,199,988	7,098,958	8,781,908	10,960,988	11,244,054	10,713,286	10,093,622	11,636,053	10,552,956	13,445,790	12,257,593	9,707,401	10,260,890
All other shelled or unshelled, not specially listed.....lbs.	10,598,186	10,441,327	9,938,337	3,584,544	2,962,663	3,050,989	3,600,056	7,426,313	3,272,492	2,772,589	2,769,634		
Total of nuts imported Dollars	\$9,315,891	\$9,563,742	\$8,549,997	\$12,775,196	\$14,265,572	\$15,626,485	\$13,508,307	\$19,815,713	\$16,865,244	\$20,594,434	\$33,667,688	\$49,930,283	57,499,04

a—pounds.

THE WOODSON PECAN SHELLING MACHINE

IS STILL IN THE LEAD

Built and runs like a "Packard", and is in use by over 90 per cent of the Commercial Pecan Shellers in the United States.

Also manufacturer of the Woodson Automatic Pecan Grading Machine.

There is a reason why 90% of the Commercial Pecan Shellers of the United States use the WOODSON machine.

Write for catalog to

ROBERT E. WOODSON, INVENTOR and MANUFACTURER

P. O. Box 1362

ST. LOUIS MO.

Nurserymen Should Know

That one of the fastest growing industries in the country is

NUT CULTURE

Demand for information as to Nursery-grown Nut Trees is insistent on all sides. Full information by specialists appears regularly in

AMERICAN NUT JOURNAL

Leading National Publication of the kind

Subscription \$2.00 Per Year

Advertising Rate \$2.80 per inch

AMERICAN FRUITS PUBLISHING CO., Inc.

39 State St., ROCHESTER, N. Y.

Three Million Pounds of Pinon Nuts from New Mexico

THE pinon nut is the fruit of a cone-bearing pine, native to the American Southwest, known scientifically as *Pinus edulis*, or edible pine. The tree grows in profusion on the high mesa lands of Arizona and New Mexico, at altitudes ranging from five to seven thousand feet. Its habitat reaches from Taos in Northwestern New Mexico, southward to Magdalena—westward as far as Flagstaff in Arizona and northward to the Grand Canyon. There is a pine nut native to Old Mexico, and another in California, but both are inferior to the pinon nut in richness and flavor.

Inasmuch as it is native grown, no money being invested, it is a profitable crop, but the yield is uncertain. Generally speaking, there is a full crop every five years; but since all trees do not bear at the same time, very few years pass without at least a partial crop.

The pinon tree is never large, often bearing profusely when not more than ten feet in height, and seldom reaching above twenty feet. It lives to a great age. A recent magazine article spoke of the long bearing period of the English walnut, stating that trees are now bearing which had been producing for one hundred and fifty years. What do you think of forests of pinons producing nuts when the Spaniards came to the country in 1540, and bearing ever since? Each year there is visible increase in the yield, and the nuts gathered in 1921 are unusually large and of extra fine flavor.

There is a certain amount of romance interwoven in all industries, and this is no exception. The manner of gathering and marketing the pinon is most picturesque and romantic—the work being done in most part by native Indians or Mexicans, whole families and communities working together.

With the first frosts, about the fifteenth of September, the cones begin to open, allowing the contents to fall to the ground. While the pinon is very small, slightly above a half inch in length and about half that in diameter, the yield of one tree is considerable, and within a few days the ground is covered with the fallen nuts. The harvest is now ready and the native Indians of one locality, all working together, gather the crop there, then hasten along to another point, and so on throughout the entire pinon section. The process of gathering is essentially slow, being done by hand, in a way that reminds one of the gathering of honey by honey bees. Yet the workers are many, and the entire crop is soon picked, sacked, and deposited temporarily in the native homes.

The first middleman is the reservation Indian trader. The nuts are brought to the various trading posts in bags of all sorts and sizes, where they are sold or bartered for merchandise. Here they are cleaned, placed in substantial bags of uniform shipping size, 100 pounds to a bag, and when sufficient quantity has been made ready for market they are transported by means of Indian teams and wagons to some railroad shipping point, such as Winslow in Arizona, and Gallup, Magdalena or Santa Fe in New Mexico. They are loaded in cars in the same manner as sacked grain, and forwarded to

Two Million Pounds From Gallup, N. M., Bringing in \$250,000 — Cracking Machine Just Invented

some market, usually an eastern market; only occasionally does a carload go to a western city.

A very small percentage of the crop is used by confectioners; the greater part being sold at fruit stalls in small glass measures, at a dime, a nickel or a penny a glass. One dealer in Gallup sold in 1921 four hundred thousand pounds to a New York buyer, destined to be handled through slot machines. This method will no doubt give the nut a wider field for distribution than it has hitherto known.

The pinon nut was mentioned by the Spanish explorers in the sixteenth century, when



BEARING PINON TREE OF AVERAGE SIZE AS IT GROWS IN NEW MEXICO

Courtesy of T. E. Purdy, A. T. & S. F. Ry. Agent Gallup, New Mexico

writing of the country discovered, its people and its resources. But it was not until after the American occupation three hundred years later that the nut became known commercially. The story of the beginning and early development of the industry, is the story of the old Santa Fe Trail, the Commerce of the prairies, and the building of the Santa Fe railroad and the consequent opening up of transcontinental transportation in the early eighties.

From the small beginning, as initiated by post traders during military occupation, when small quantities were hauled by wagon train to St. Louis and El Paso, shipments have steadily increased in volume, until the present crop of 1921, which has been estimated at over three million pounds for the state of New Mexico. Shipments from Gallup alone will amount to two million pounds—a revenue for the shippers and producers of something like a quarter of a million dollars. This in addition to the revenue to the railway carriers, which is an item of no small importance.

The Louis Hfeld Company of Albuquerque has long been a heavy dealer in pinons, be-

ginning to ship in large quantities in 1906. In 1907 this firm shipped to New York market fifty-three carloads, the greater portion moving from Gallup, New Mexico.

In 1908 and 1909 the crop failed. In 1914 and 1915 there was heavy crop, equaling that of 1907.

The name "pinon" (pronounced pinyon, long o, accent on last syllable) is usually mispronounced by those unfamiliar with the Spanish pronunciation. For instance, a firm making shipments from Gallup in 1919, made application for insurance. Before granting their request, the insurance company asked to be informed as to the nature of the commodity; whether it consisted of feathers, or was it a piece of machinery. They had evidently made the very usual mistake of calling the name "pinion."

One of the disadvantages encountered in the consumption of the nut in other than small quantities, is the slow and tedious process of removing the kernel from the shell. This disadvantage it is thought will be overcome by the introduction of a pinon sheller which has been invented and patented by Mrs. Fannie S. Spitz of Albuquerque, New Mexico, thereby making the nut available for the use of bakers and confectioners, heretofore debarred by the slow and costly process of shelling by hand.

The district forester at Albuquerque, N. M., reports that last year 276,000 pounds of pinon nuts were gathered in the Carson country; 490,000 pounds around Santa Fe, and in the Datil forest 500,000 pounds; the total for the state of New Mexico being 1,176,000 pounds representing a retail value of \$235,000.

Spoken Eleven Years Ago

In a discussion before the Ohio Horticultural Society, March 19, 1910, Prof. William R. Lazenby, Columbus, O., on the subject of the dietetic value of fruit said:

"The increasing interest manifested in food reform, which has already resulted in the more general use of a balanced ration for the human stomach, should, in view of the high cost of living, consider the dietetic value of nuts as well as fruit.

"It is not unlikely that our present dietaries will be so modified in the near future as to include a larger use of these two important classes of food products.

"The use of nuts, particularly, may well be encouraged at this time, when meats of all kinds are so high as to be almost prohibitive and a more purely vegetable diet is demanded on the score of economy. As is well known, a large part of our vegetable foods are deficient in fat. Nuts excel in fat. Chemical analysis has shown that the kernels of the butternut may contain as high as 60 per cent of fat, the black walnut 50 per cent, and the American chestnut 15 per cent. This proves that a comparatively small quantity of nut kernels will supply the requisite amount of this ingredient for a well balanced daily ration.

"Nuts are also comparatively rich in proteids."

February 2nd was Pecan "Planting Day" at Bastrop, Tex.

THE FUTURE OF THE AMERICAN GROWN FILBERT

Previous to 1916 Less Than 150 Acres Comprised the Total Growth in U. S.—Acreage Now Is 600 and by 1926 It Will Be Several Thousands in Oregon and 1000 in Washington—The Nurseryman Will Determine This—6000 Acres Producing 4000 Pounds to the Acre Needed To Equal Importations—Imported Nut About Half the Size of Commercial Filbert of Pacific Northwest—Filberts Can and Will Be Grown In Eastern States.

Only during the last two or three years has the interest in filbert culture been general even in the states of Oregon and Washington. Previous to that time filbert culture was thought to be more or less a failure and is still in the Eastern states if judged by the wonderful results obtained on the Pacific slope. I can safely estimate that previous to 1916 less than one hundred and fifty acres of filberts composed the total acreage of the United States and that today the acreage is around six hundred; by 1926 it will be several thousand in Oregon and around one thousand in Washington. The Nurseryman will largely determine the acreage to be planted between now and 1926. It is up to him to produce several million filbert trees at prices growers are willing to pay.

IMPORTED NUT NOT COMPETITOR

It will take 6000 acres producing 4000 pounds to the acre to give a production equivalent to our present importations of this nut. The imported nut averages little better than half the size of the commercial filbert as grown in Oregon and Washington. It is often rancid and wormy, therefore it will not prove to be a determining factor in the price asked for American grown filberts, nor will it interfere with the marketing of the product of many thousands of acres which will be devoted to filberts in the Northwest and elsewhere in the United States.

FILBERTS IN EASTERN STATES

Some growers claim that the filbert cannot be grown successfully in the Eastern states, but I believe it can and that it will be. There are several factors entering into the culture of filberts which may be summarized as follows, plenty of rainfall or adequate irrigation, rich well drained sand or clay loam soil, clean and persistent tillage, a collection of varieties to insure proper pollination, pruning which shall consist of removing all suckers growing from below the crown and from the trunk of the tree once each season, for the bush form is not practical, and last but not least, some method of combating the blight which attacks the filbert whenever it is grown where the Eastern hazel (*Corylus Americana*) is or has been growing.

BLIGHT CAN BE CONTROLLED

I believe that the blight can be successfully controlled by spraying with some copper solution such as bordeaux mixture. Several different applications being made to insure the killing of all spores of the fungus of blight. Experiments should be undertaken to find out if this spraying would be effective in controlling blight and to determine the best season in which to spray. I shall be glad to hear from anyone who knows if any such experiments have ever been undertaken.

FILBERT A PRODIGIOUS BEARER

That the filbert is a prodigious bearer can be realized when it is known that different growers in Oregon claim yields from sixty to seventy pounds per tree and I know of one instance where a yield of over one hundred and fifty pounds was reported from one Barcelona tree thirty odd years old. George Doris of Springfield, Oregon, claims a yield of thirty pounds per tree from

nine year old trees throughout his orchard which is the largest bearing filbert orchard in U. S. His yield amounted to ten pounds per tree sixth year.

L. F. Russell of Washougal, Wash., harvested five hundred pounds of filberts from twenty-five nine year old Barcelona trees which were pollinated by trees of the Daviana variety. In the East the Barcelona seems to be in disfavor. Why is that? I would hazard a guess that it is not properly pollinated and I would recommend the Du Chilly, Daviana and White Aveline for that purpose. I can see no reason why they shouldn't prove equally as valuable in New York as they are in Oregon.

WESTERN METHODS

The usual method of planting filberts here is to space them twenty feet apart in squares giving one hundred and eight trees to the acre. A few plantings have been made with a ten foot spacing and some with a twenty-five foot spacing while others plant at whatever spacing suits their fancy. I lean toward the ten foot spacing because I believe the trees will be heavier bearers on account of better pollination and because I will be able to take care of four times the trees with the same effort one would apply to 108 trees under the twenty foot spacing. With this system many of the trees must be removed to prevent crowding at ten or twelve years. I believe that the filbert is primarily a filler crop on account of its early heavy bearing and its slow growth and should be used accordingly.

In support of my argument I am able to say that in Turkey over three thousand filbert trees are planted to the acre and reach their maximum production at eight years. Their method is to plant seven trees in a clump and space the clumps nine feet apart.

The propagation of filberts is almost entirely by cuttings or layers made of the suckers which are found about the base of the tree in such great numbers. The nuts are being planted extensively now with the intention of growing grafted or budded trees from them. Undoubtedly these budded and grafted trees will be healthier stronger trees with a less tendency to throw suckers. The budded and grafted trees is the only hope of the Nurseryman who wishes to catch up with the demand for filbert trees on the Pacific slope. Long life to the filbert; it is the biggest bet of extreme Western horticulturists today.

RICHARD H. TURK.

Washougal, Wash.

Chestnuts for California

Commercially speaking, chestnut growing in California is not of great importance now, but with conditions in many places favorable, and with a tremendous reduction of the eastern crop, because of loss of trees by blight, there is sure to be a development of this branch of nut growing in California.

It is highly important that chestnuts planted in this state be very carefully inspected, not only at the time of planting, but also for several years afterward, in order to detect the first signs of the dreaded chestnut blight.

A Medal Highly Merited

Editor American Nut Journal:

I am just in receipt of information to the effect that Mr. E. A. Riehl, R. I., Godfrey, Illinois, has recently been awarded a Wilder medal by the American Pomological Society for his work on chestnuts. Never was a recipient of one of these medals more worthy of it.

Many years ago Mr. Riehl started on his place young chestnut trees, American, European and Japanese. He also procured trees of the best varieties then propagated. These trees were set on a part of his farm where the growing of ordinary crops was not easy on account of the steep slopes. The trees grew and eventually bore. There were trees of three species and a number of varieties growing together, and opportunities for cross pollinization and hybridization were almost ideal.

Mr. Riehl planted nuts of the trees as they came into bearing and raised more trees which he set out in his pasture as the original hillside became filled. As these young trees came into bearing the earliest bearing were numbered and carefully watched. Some few of them have been found to bear nuts of unusual excellence, some have a particularly delicious flavor, some are of most unusual size, some have the quality of having the burrs open on the tree and discharge the nuts which fall to the ground giving the owner the trouble only of picking them up; others are very early bearers, and others late.

The best variety from all considerations has not been worked out but Mr. Riehl has enough varieties so good that the final selection of the best variety or the best half a dozen may be confidently left to the experience of those who plant orchards now.

All Mr. Riehl's original plantings were before the coming of the chestnut blight to this country. He is hundreds of miles away from native chestnut timber and his orchards are free from both the blight and the chestnut weevil and seemingly if he is careful not to import them, may remain free from them indefinitely. His trees are beginning to produce substantial crops and Mr. Riehl has the distinction of having planted the only commercial nut orchard in the Northeastern United States.

Those who are outside of the native chestnut area of the country and still are in a section where the chestnut will grow and do well, can repeat Mr. Riehl's success without having much of the years of waiting and uncertainty as to just what to do to get desired results that Mr. Riehl has had. Mr. Riehl sells young trees grafted to the fine varieties he has originated. Chestnut trees bear young and prolifically.

Mr. Riehl certainly deserves the thanks of the Northern Nut Growers Association and all interested in developing our northern nuts. As mentioned above, I feel certain that a Wilder medal was never awarded to a more worthy recipient.

Baldwin, N. Y. WILLARD G. BIXBY.

Wm. N. Neff, Martel, O., has 15 young nut trees, most of which are budded or grafted.

American Nut Journal

COVERING NUT CULTURE

NORTH—SOUTH—EAST—WEST

AMERICAN FRUITS PUBLISHING CO., INC.
59 State Street - Rochester, N. Y.

RALPH T. OLCOTT, Editor and Manager
Official Journal Northern Nut Growers' Assn
Official Journal National Nut Growers' Assn

SUBSCRIPTION RATES

One Year, in advance.....\$2.00
Canada and Abroad..... 2.50
Single Copy20

ADVERTISING RATE

Per column inch.....\$2.80
Forms Close 10th of each month

ROCHESTER N. Y., MAR., 1922

NUT ASSOCIATIONS

California Almond Growers' Exchange—President, G. W. Pierce; manager, T. C. Tucker, 311 California St., San Francisco.

California Walnut Growers' Association—President, C. C. Teague; secretary, W. T. Webber; manager, C. Thorpe, 1326 East Seventh St., Los Angeles, Cal.

Georgia-Florida Pecan Growers Association—President, J. M. Patterson, Putney, Ga.; vice-pres., A. C. Snedeker, Blackshear, Ga.; sec'y-treas., J. S. Wight, Cairo, Ga. 1922 meeting, Thomasville, Ga.

National Nut Growers Association—Pres., Charles A. Simpson, Monticello, Fla.; vice-pres., J. M. Patterson, Putney, Ga. and E. C. Butterfield, Winona, Tex.; secy., J. Lloyd Abbot, Spring Hill, Ala.; treas., J. Slater Wight, Cairo, Ga. 1922 meeting, Thomasville, Ga., Oct. 4-6, 1922.

National Pecan Growers' Exchange—President and manager, William P. Bullard, Albany, Ga.; vice-pres., J. B. Wight; secy-treas., A. D. Galt.

Northern Nut Growers' Association—President, James S. McGlennon, Rochester, N. Y.; vice-pres., J. F. Jones, Lancaster, Pa.; treas., Willard G. Bixby, 32 Grand Ave., Baldwin, N. Y.; secy., Dr. W. C. Deming, Georgetown, Conn. 1922 meeting, Rochester, N. Y., Sept. 7-8.

Texas Pecan Growers' Association—President, J. H. White, Mason; vice-pres., William Capps, Fort Worth; secy., J. H. Burkett, Austin, Tex.; exec. Com., J. H. Burkett, Austin; Prof. Will H. Mays, Austin; Prof. A. Caswell Ellis, Austin.

Western Nut Growers' Association—President, Ferd Groner, Hillsboro, Ore.; secy-treas., C. E. Schuster, Corvallis, Ore.

FEDERAL AID

Chairman J. M. Patterson of the committees on Federal aid (of the National and Northern Nut Growers Associations) on a recent trip to Washington took up the subject of the appropriation for the pecan industry with the heads of the departments having charge of pecan development. He learned that they could not claim special emergency to justify an increased appropriation. During the summer Mr. Patterson's committees will lay plans for securing an increased appropriation in the departments with the Secretary of Agriculture, with the chairman of the budget committee and down through the House to the Senate. Meantime Dr. Waite, in charge of plant diseases and Dr. Howard of insect work have funds to proceed with their special investigations. Mr. Patterson suggests that the National Association add to the committee representatives for Florida and Alabama.

In his arrangements for the annual convention of the Northern Nut Growers Association, in Rochester, in September, President McGlennon proposes to make special provision on the program for women, many of whom have become directly interested in nut culture. Among those who will speak at the convention are Mrs. William C. Deming and Mrs. C. A. Reed.

FOR A NATIONAL PROGRAM

One of the most important papers presented at a convention of nut growers in recent years is that read by Dean R. L. Watts, of the College of Agriculture, State College, Pa., before the Northern Nut Growers Association, in Lancaster, Pa., last fall. This paper was presented in full in the November issue of the American Nut Journal, at page 60-61. Lack of space has prevented reference to this subject until now. The problem is stated concisely by Dean Watts:

"In view of the important place which nut trees should have in American horticulture, can we not manage in some way to plan and carry out a comprehensive national program for the promotion of this proposition? Surely there are thousands of people and hundreds of organizations and institutions of various kinds which would consider it a privilege to have a real part in such a worthy cause."

This is directly in line with what Dr. W. C. Deming, secretary of the Northern Nut Growers Association, has urged repeatedly. It has been his hope that institutions and organizations would do just this—would enter actively into systematic work for the development of nut culture based upon the progress made by a comparatively small number of individuals who, so far as northern nut culture is concerned, have for the most part treated the subject, of necessity, only as a side line, an avocation. It has been Dr. Deming's belief that marked progress in nut culture, especially in the northern states, could be expected only when institutions thoroughly equipped for horticultural development should take up the subject systematically. To this end he has made special effort, from time to time, to interest state experiment station directors in the work of nut culture. The response has been quite generally one of appreciation of the importance of the work and of the progress already made by individuals too few in number and handicapped by lack of resources for broad and rapid results. Insufficient appropriations for undertaking this work have prevented experiment station activity except in a few cases.

Dean Watts suggests that government provision for expansion of research in nut culture should be made; that C. A. Reed, nut culturist, should have a staff of several specialists; funds should be provided for state experiment station work; the U. S. Dept. of Agr. should increase its provisions; state departments of agriculture, forestry, conservation, etc., should be enlisted in the service. And, to this end, there must be demand and outside pressure from prominent people in behalf of funds, experts and equipment for development.

It is encouraging to note that one Agricultural Experiment Station, that at Auburn, Ala., has taken special interest in Dean Watts' suggestions. The attention of the readers of the American Nut Journal is directed to what the Alabama Polytechnic Institute is doing along these very lines. The horticultural staff of the institute has been much impressed with Dean Watt's suggestions, some of which are similar to those which were to have been presented to the National Nut Growers Association at the Mobile convention last fall. The unavoidable absence from that meeting of Mr. Kimbrough of the institute prevented.

As outlined by C. L. Isbell, associate horticulturist of the institute the freshman class is given plant propagation one half year. This includes producing of seedling pecan trees. Each student grafts a certain number of trees, using seedlings planted by

the preceding class. Each student is taught how to bud and how to transplant. The sophomore class is instructed the entire year in orchard management. The vocational students are given a thorough, practical course in pecan culture. The senior class studies insect and disease control and specializes in varieties of pecans. Only 30 miles from the institute is the largest variety planting of pecans in Alabama, that of J. A. Kernodle, at Camp Hill, where the senior class makes special studies at harvest time. There is a small painting of pecans at the experiment station.

With sufficient funds, this kind of work could be done at other state institutions, North and South. Experimental plantings at state stations should give data which could be published in bulletin form frequently, to much greater extent than is now done. Readers of the American Nut Journal would materially aid if they would volunteer to urge upon their legislators the need for special appropriations for developing a great food supply for the nation. Money thus spent would be of direct benefit to all persons everywhere.

The work is too important, too extensive, to be allowed to rest heavily upon the shoulders of a few, no matter how enthusiastic and sacrificing they may be.

Have our readers suggestions which may be considered in the mapping out of a National Program for Development of Nut Culture?

FOR STATE ASSOCIATIONS

President James S. McGlennon of the Northern Nut Growers Association revives the suggestion, several times made in the Journal, that state units composed of members of the Association could get much benefit throughout the year by associating under the direction of the state vice-president of the Association, for discussion of nut culture topics and report their proceedings to the Journal; besides forming a nucleus for increasing membership in the Association.

The Association has a regularly appointed list of vice-presidents. All that is necessary is for each of these to get, through Secretary W. C. Deming, 607 Main St., Hartford, Conn., or Treasurer Willard G. Bixby, Baldwin, Nassau C., N. Y., a list of members of the Association in his state and then communicate with them to the end that a state association subsidiary to the Northern Association may be formed and meeting arranged. It is often more convenient to attend a state branch meeting than the main meeting.

Who among the state vice-presidents will be the first to announce formation of a state organization co-ordinating with the Northern Association?

TRIBUTE TO THE AMATEUR

In a paper prepared for the Mobile convention of the National Nut Growers Association, R. W. Fair, manager of the Texas Pecan Nursery, Arp, Texas, pays tribute to the enthusiasm and the encouragement afforded by the amateur nut tree planter. It is due to the side-line activities of many persons that nut culture has been developed in many cases. The amateur is under lasting obligation to the investigations and the instruction freely given by the pioneer amateurs, some of whom became professionals, namely, Colonel Stuart, William B. Schmidt, Richard Frotscher, E. E. Risien, M. Falkner, E. W. Kirkpatrick, Charles L. Edwards, H. A. Halbert, the Delmas and Bacon people, etc.

The amateur is a direct aid to the Nur-

seryman and to the commercial grower, to the extent that he has studied and experimented and is able in some degree at least to advise the novice. There is a constantly increasing number of amateurs. It is to these that the seasoned nut tree grower and the Nurserymen should give every encouragement for out of these are made the successful growers a large scale.

THE FILBERT: BY AN EXPERT

In this issue is presented a discussion of the prospect for Filbert Culture in America, which is of unusual interest. It is by a noted filbert grower; it is based upon facts proven by himself and by his personal observation and it is backed by practical experience during a term of years in which remarkably successful results have been obtained.

Richard H. Turk, Washougal, Wash., has made a special study of the filbert. He has the orchards to prove his statements. It is probable that there is no higher authority in the country on this subject. The results of his intelligent work are herewith presented for the information and guidance of others.

Mr. Turk shows what has been done since 1916, a five year period, and what may be expected by 1926, a ten year period. Upon the Nurseryman will largely depend the acreage that will be devoted to filberts five years hence. The Oregon and Washington filberts are nearly twice as large as the imported filberts and of better quality. In Mr. Turk's opinion the filbert can be successfully grown in the Eastern states and he suggests the varieties which should be planted there. Blight can be controlled. The filbert is a prodigious bearer, as shown by results already obtained in the Pacific Northwest.

There is indication in Mr. Turk's article on another page that scarcely a beginning has been made in the Eastern States in the industry which is advancing rapidly on the Pacific Coast; though our readers have been acquainted with the earnest and persistent work by Messrs. McGlennon and Vollertsen at Rochester, N. Y., with German varieties—a work which has elicited special commendation by Dr. C. S. Sargent of the Arnold Arboretum.

In the opinion of Mr. Turk, the filbert is the biggest bet of extreme western horticulture today. Its possibilities throughout the United States have scarcely been tried.

HIGHLY MERITED RECOGNITION

The tireless, conscientious work of the representatives of the U. S. Department of Agriculture in the special field of Nut Culture was appropriately recognized by formal resolution at the last convention of the National Nut Growers Association:

"This Association desires again to express its appreciation of the excellent work being done for the pecan industry by the representatives of the Department of Agriculture. These gentlemen have already solved for us many of the problems which a few years ago seemed doubtful of solving, and the investigational work they now have under way promises to be of untold value to pecan growers.

Especially do we wish to record our appreciation of the intelligent efforts of:

Mr. J. B. Demaree, of the Bureau of Plant Disease Investigation.

Mr. J. B. Gill, of the U. S. Bureau of Entomology.

Mr. C. A. Reed, Nut Culturist.

Dr. J. J. Skinner, of the Office of Soil Fertility Investigations.

We assure these gentlemen of our hearty appreciation of their sincerity and pledge them our continued loyalty and support."

The many readers of the Journal who have repeatedly benefited signally by the

advice and suggestions of these skilled workers will, as we are sure, join heartily in the sentiment of this Association expression. The editor of the Journal knows full well the great importance of the practical labor of these men.

Secretary J. Lloyd Abbot of the National Nut Growers Association has the proceedings of the last convention in readiness for the printer and completed copies may be expected by the members early next month. Delay was unavoidably caused by a serious accident to former Secretary A. S. Perry, Cuthbert, Ga., who during a Christmas celebration was severely burned when a costume of cotton he wore caught fire from lights on a tree. He had been preparing the convention minutes to turn over to Secretary Abbot.



J. LLOYD ABBOT, Spring Hill, Ala.
Secretary National Nut Growers Association

AN UNUSUAL CROP OF PINON NUTS

Our readers generally, and especially those who have enjoyed eating salted pinon nuts mixed with salted pecans, almonds and walnuts, will be interested in the article in this issue descriptive of the pinon. This nut is not a cultivated commodity. It is obtained mainly by Indians, from wild trees growing on steep mountain sides at altitudes of 5000 to 9000 feet. Crops are very irregular, but that of 1921 was large. It is stated that 100 carloads of these nuts were handled by the Santa Fe railroad lines last fall and winter from the district between Albuquerque, N. M., and Winslow, Ariz.

The chief difficulty in marketing this nut appears to have been the lack of a machine for cracking the shells without breaking the kernels. In the shelled condition it is unable successfully to compete with the seeds of the stone pine of Southern Europe, which in large quantities are imported into this country in the shelled condition, under the name "pignolia." The sanitarium at Battle Creek is probably as large a single consumer of this latter product as is any institution in the country. Dr. Kellogg once remarked that although the home grown product was practically of as pleasing a flavor as the pignolia, it did not have the same food value. However, this fact does not seem to be generally known and apparently these nuts could be sold readily in the same market with the pignolia, if they could be successfully shelled. It now appears that a machine for cracking the home product has been devised by a woman in Albuquerque, N. M.

A TIMELY TOPIC

We direct special attention to the analysis by Harvey C. Stiles, in this issue, of the causes of poorly filled pecan nuts of the last crop, and the suggestions as to remedies. We believe this is one of the most important matters to engage the attention of all pecan growers—those whose crops were not affected last year, as well as others. For as Mr. Stiles clearly shows, this is a condition which any grower may face if he has not taken measures to prevent it. Our readers are particularly fortunate in having this lucid discussion of a timely topic and we believe they will be grateful to Mr. Stiles for presenting it.

The proceedings of the last annual convention of the Northern Nut Growers Association are about to be issued. Delay in their appearance is in no wise to be attributed to the secretary for he had all in readiness for issue during last fall. It has been due to the crowded condition of the printing establishment which like all others is behind in work, due to printers' strike.

Harvey C. Stiles, long known throughout Southern horticultural circles as an expert in landscape work and orchard development, as well as a pecan enthusiast, was called from his last trip to the Pecan Production Company's grove in Louisiana—the old Van Deman property which he is bringing out of its inefficiency—to New York City to become horticulturist at "Idlehours," the magnificent W. K. Vanderbilt country estate at Oak Dale, Long Island, which is being prepared for use as a club house for wealthy New Yorkers. This is a signal honor for Mr. Stiles; for the range of choice in this case was unlimited.

Fashions In Trees Well Nigh Irresistible Wonder Not Thought of Before

"There are fashions in trees," remarks the Cleveland Plain Dealer. "A few years ago the cottonwood was generally planted because of its rapid growth and its extreme hardness. After the cottonwood the oriental plane ruled as favorite. Now there are other trees perhaps more desirable than either, which are being generally planted."

The maple and oak and elm remain favorites in most sections of the country, but there is far more variety than there used to be. One of the marked tendencies of the present time is the planting of nut trees.

It is a wonder that this has not become a vogue long ago. When you consider how excellent many of the nut trees are for shade, how beautiful they are in form and foliage and what unspeakable attraction they possess in the fall for children, the arguments in their favor are well-nigh irresistible.

Nut-farming is coming to be a recognized branch of agriculture. Nut trees are planted on country estates in greater number than ever before. They are invading city yards, and even city streets. The lordly chestnut, the stately black walnut, the erect shell-bark hickory, the butternut, with its almost tropical foliage, the spreading pecan and shapely English walnut, both of which have hardy varieties that flourish in the northern states, the filbert and hardshell almond, half tree and half shrub, all are rapidly winning favor among those who are not bound by arboreal precedent and who take the trouble to make a fair estimate of tree values.

All the nut trees have this particular advantage over ordinary shade trees, add the production of a valuable crop, for which they require no care and whose reaping is a pleasant recreation. Nuts, it may be added, are more highly esteemed every year as food. Why plant trees which are shade trees and nothing more, urge the nut enthusiasts, when one may just as easily have utility along with beauty and coolness?

If it relates to Nut Culture it ought to be in "American Nut Journal." Please send send it in.

HOW TO GUARD AGAINST FAULTY NUTS

TIMELY warning is given to pecan growers by Harvey C. Stiles, the well-known pecan expert and horticulturist of Texas, in the matter of imperfect nuts which went on to the market last fall and later, in large quantities. He says:

"There is a situation in the pecan market this year that should make the grower of soft-shell, large, grafted pecans take utmost pains to guard against another year. In very many markets I find as I traverse the entire South—the pecan states—the pecans in the open market have many defective nuts, hollow, or shiveled, etc.

"With the truly splendid prices brought by the fine grades last season, better than ever, and with a record crop and falling prices in other foods, there was a natural desire to market old nuts. But surely not one grower could fail to see that every sale of these faulty nuts is active and effective propaganda against future good prices. Surely the proper pride of the pecan grower in this princely product should stay his hand at inflicting this blow at his own treasure. But it is, of course, one of the evils that will finally cause all pecans of merit to be marketed under the brands of responsible associations of growers large enough to distribute their own product.

"As my mission is not marketing, but producing—securing the greatest possible efficiency from trees and soil—there are yet more interesting phases of this faulty nut trouble this year. Asked constantly why this occurred this year, I have sought throughout the entire pecan belt to learn the cause. Probably it lies in just one word, a thought filled with comfort in a world full of perplexing results—namely, compensation.

"Studying the pecan deeply and widely, we seldom find trees giving regular and heavy crops; usually a good crop only once in two or three years. And why? The answer is in the one word: Compensation. First, the pecan is a tremendously rich product, deriving directly from the soil (as shown in the masterly paper of Miss Perry at the Mobile convention) nearly ten times the available food units produced by animals used as food. Then we must remember that during the identical months in which the pecan tree is gathering and storing this marvel of stored food, it must also gather and store in its fruit buds all the initial food for its infant crop—the nuts of next year. And it is simply too much to ask the tree to do unaided. Nature seldom does it, as we all know, and as stated above, is not able to do it except under rare and peculiar conditions.

"In asking it, we must truly and fully compensate. We must enable the pecan tree to find the elements with which to manufacture the current crop of rich nuts and the embryo crop, at one and the same time. We are quite willing to let kind Providence do this for us; and in some of our selected varieties, bred for this, we secure that willingness to do this double duty, year after year.

"But last year's crop, in very many instances, was simply asking too much. In some cases there had been early defoliation, by Gulf storms. And in nearly all the pecan belt the moisture supply was much below the need, even, to mature with full meats the full crop. Mother Nature did her best; but there were too many mouths for the food supply (which we forget is wholly the soil elements in liquid solution). And so, in the best producing sorts especially, there were these half-filled nuts. If we ask the regular,

heavy crop, we must insure the regular, even, abundant supply of suitable plant food, and the requisite moisture in proper supply (not over-supply) for its liquid solution.

"This states the situation causing the many faulty, partly filled nuts of the last crop. The remedy is various—differing in every case, in every grove. But the problem can be met in every case. It must be if we are to reap the full reward—the splendid profit the pecan is able to give. It will be met under the operations of

"**Cultivation**—to retain and conserve moisture and to render the soil elements readily available;

"**Drainage**—to cure excess moisture and to aerate and sweeten the soil, so that healthy assimilation may go on;

"**Liming**—to cure acidity which 'locks up' the soil elements of fertility;

"**Fertilizing**—to restore the deficiencies of soils—natural, or from some special or long-maintained cropping;

"**Pruning**—to assist the trees to resist storms, or reduce their fruit buds;

"**Spraying**—to exterminate fungous or insect enemies.

"Sometimes it is one problem; sometimes another; sometimes all or several. But in most cases the remedy is to be found, and a rich reward is for its finding and application.

"Everyone loves pecans, and will buy them as the knowledge becomes universal that the pecan has food value equal to the best meat and is far more wholesome and delicious. In one of the Gulf states are large groves whose owners are much disturbed because the trees fail to bear well. The remedy will be found in the premise stated. It is mainly in the depletion of the soil of one or more essential elements for heavy production of pecan nuts; also, secondarily, the almost fatal investment of the trees with fungous and insect enemies—a condition often accompanying both plants and animals under malnutrition. In other cases this malnutrition is solely from acidity of soil, because of bad drainage.

"The pecan is a high class product, one of the choicest given to man. It is worthy of the best, most sympathetic and skilled help that can be given. For that is compensation."

Prize for Exact Reproduction

Austin, Texas, March 10—For the purpose of stimulating research and investigation along scientific lines relative to pecan development, J. H. Burkett, nut specialist of the state department of agriculture, has offered a prize of \$10 for one pound of pecans of any named variety grown in Texas that is the exact reproduction of the parent from which they were grown. The evidence in proof must be such as would establish beyond any doubt the correctness of the claims made.

"In proof of the fact that a given pound of pecans is the offspring of seedlings from a given variety any evidence that would pass regular rules of evidence in the courts would be acceptable," said Burkett. "As to the proof that the nuts were exactly the same, the nuts would be examined and passed on by the best authorities to be found on the question of varieties."

Sutter County with 173,547 bearing almond trees ranks fourth among California counties in producing almonds, according to federal statistics. Yolo County leads all with 335,862 trees. Butte has 265,258, Contra Costa 232,413, and San Joaquin 224,981. Yuba County has only 6609 almond trees.

Just mention AMERICAN NUT JOURNAL.

Cultural Topics

Perusal of Dr. Robert T. Morris' book "Nut Growing," led W. T. Evers, Denton, Tex., to propound queries which Dr. Morris has answered specifically. Our readers will doubtless be interested. Queries 1 to 4 are implied in the answers. Mr. Evers asks further:

5. It does not seem to hurt a pecan tree to plant it several inches deeper than it was growing in the nursery row. If some buds are not congenial with the stock on which they are set, would it not help the tree to plant it enough deeper than originally growing, to allow the grafted top to send out some lateral roots, thus making what might be called a double root system, and letting the grafted top get some lateral roots, thus making what might be called a double root system, and letting the grafted top get some benefit from its own kind of roots.

6. On pages 66 and 67 of "Nut Growing," the statement is made that we do not want too much moisture about the scions to be used, because moisture encourages vital chemistry before it is needed. For this same reason, is it not best to transplant a tree under as dry conditions as is safe to keep the tree alive, thus saving the vital chemistry, or strength, for the growing period? I do not use water in setting pecan trees, and use very little of it during dry summer months, believing that the young tree's roots struggle more for existence in comparatively dry ground than in ground that is too wet, when the air is fairly scorching the leaves. I believe that a reasonable amount of water supplied, when moisture in the ground is lacking, is advisable, but it is not convenient for me to properly water all my trees, so I depend upon keeping the ground stirred and mulched, and using a shade over the tree when necessary. This question, however, refers to the planting. For the same reason, would a tree transplanted after a dry year in the Nursery not be better than one transplanted from too wet ground.

7. In using paraffin on grafts, is there danger of using it too hot, and must we first wrap the graft with cord to keep the paraffin from preventing the two cambiums from coming into contact with each other?

Dr. Morris replies:

1. The question of painting or paraffining all cut or bruised parts on roots of trees that are to be planted is something that I do not know about practically but there comes to mind the idea that sap pressure might force off any sort of covering.

2. I would fear the effect of adding creosote to paraffin or any other covering for cut or bruised parts of roots for the purpose of controlling bacterial, fungous, or insect enemies. Creosote is a protoplasmic poison. Tobacco stems added to the dirt which is to be placed about the root of the transplanted tree appear to have marked influence in controlling insect parasites.

3. Theoretically it would not be desirable to cover the entire exposed top of any transplanted tree with paraffin because that would cut off all breathing on the part of the tree left above the ground. The serious escape of moisture is perhaps best managed by cutting the top back rather severely and merely covering the cut end with paraffin.

4. When a pecan tree or any other tree is to be cut back at the time of planting or a little later it is best to do the cutting before any leaves have been put out. Any leaves which have been put out before a new root system is under way must use up food that has been stored in the cambium layers. The first loss of plant food from cutting off tops with buds already started means more or less loss from the entire plant. The total amount of stored-up food in the plant is used in one way or another in relation to starting of top buds.

5. If the grafted tree is planted deeply enough to allow some roots to start from the graft in addition to those which are growing from the stock there would be danger with some species at least of smothering the entire plant before the roots had started from the buried part of the graft itself. It would doubtless be of value to obtain additional roots from the buried part of the graft in addition to stock roots with any species which would allow such deep planting.

6. It is best to avoid too much moisture for scions in advance of grafting. After grafting it is well to allow vital chemistry to get under way as rapidly as possible as a rule, according to my experience. There may be exceptions with some species under certain conditions. A tree transplanted after a dry year in the nursery sometimes makes a better start than a tree which has made rank growth in the nursery due to an excess of food and moisture. Either extreme, however, is undesirable.

7. There is probably some danger of using paraffin too hot on grafts but in experimental work I have been surprised at the degree of heat borne by different scions without scalding. Peach grafts are the only ones which I have killed by scalding with paraffin or melted grafting wax at temperature points above 150 degrees Fahrenheit. The graft cambium and stock cambium must be bound firmly into contact with each other, however, in order to prevent very hot paraffin from entering the wound site and interposing a mechanical obstacle to repair. A certain degree of entering of paraffin will not destroy the graft. I have had successful catches in which at least three quarters of the cambium layer had been accidentally covered with paraffin. The less the better, however.

Grafting Wax Outfit

By J. C. Cooper, McMinnville, Ore.

I have given much thought and experimenting to devise a good serviceable heating device for grafting, for using alcohol, gasoline, charcoal, kindling wood and coal oil. Have finally settled down to a coal oil device composed of a small oil stove, ordinary cooking pan, ten pound lard bucket and smaller pan for holding the heated wax and brush while working on the ground or up in the tree.

The first pan is about two inches deep and eight inches across, thoroughly perforated sides and bottom with holes about one-fourth inch or less, in diameter. The oil stove can be had at any ordinary hardware store for 75 cents to \$1.25, with one three to four inch wick. The stove is set in the pan and a ten pound lard bucket turned it over, bottom side up and the bottom cut out and with perforations all around the top, so that the heat from the stove will come up against the bottom of the wax pan set on top of the bucket, or bucket bottom. Two wire bales are then attached to the bottom at four equal distances around the rim. These bales are long enough to come up over the top of the wax pan and serve as a good hand hold, which I loop together with a strap for hanging on a branch when working in a tree. The milled end of the regulator for raising and lowering the wick, to regulate the necessary heat, extends through a slot cut in the inverted bucket at the top of the bottom pan. It may be necessary to make a dent in the bucket at the slot so that the regulator will reach through. The upper pan will be about seven inches across. Make the bales loose enough to lay out flat so that the stove may be taken out and filled or cleaned. Bales are made of common baling or small iron telephone wire

Mr. Bixby Replies to Inquiries

F. D. K., South Carolina—

"The American Nut Journal has referred to me your letter of February 13th. It will probably be possible for you to get Japanese chestnuts next fall by speaking for them in advance. I think, however, that you would do very much better with some of the grafted trees that are being propagated by Mr. E. A. Riehl, Godfrey, Illinois. Mr. Riehl has trees that bear nuts very much finer than any seedling Japanese chestnut. He has a number of these trees in bearing and last fall, or year before sold about 4000 pounds in the Chicago market at about 35 cents a pound. Chestnuts can be kept for quite some time after they fall from the trees if they are put into tight fitting tin cans. Friction top paint cans do very well. The nuts must be kept in a cool place. Of course, cold storage is the best way of keeping chestnuts but everyone has not access to cold storage rooms which are kept at 36 degrees or thereabouts.

WILLARD G. BIXBY.

March 1, 1922.

T. M., Colorado:

The American Fruits Publishing Co. has

How to Plant a Pecan Tree That Will Live

By J. H. Burkett, Pecan Specialist, Texas
Department of Agriculture in Dallas, Tex.
News

THE planting of pecan trees is no easy job for the amateur. It requires horticultural judgment combined with care, but by following the instructions as herein outlined, anyone may plant and grow pecan trees with success. To be assured of success in the planting of pecan trees, one assumes that the tree has been properly dug and handled by the Nurserymen. Observation leads to the conclusion that much of the indifferent results in the past in getting pecan trees to grow is chargeable to the carelessness of the workmen in digging and packing the pecan trees preparatory to delivering to the planter, and the exposure to wind and sun by either Nurserymen or planter. If the root system of the pecan tree is unduly exposed to the wind and the sun to the extent that the roots dry out and become shriveled, no amount of after care given it can overcome the damage caused by this unwonted carelessness and indifference. Exposing the root system even for as short a period as five minutes may injure its vitality or kill it outright.

TIME TO PLANT

To obtain the best results, it is thought that pecans should be planted as soon as they have become dormant in the early winter. However, the writer has had success planting throughout the winter and early spring. One season several were planted the first day of April and 100 per cent lived. If it is not convenient to plant in the early part of the winter, good results can possibly be obtained by planting a little later.

DIGGING THE HOLE

Presupposing that the tree has been properly dug and delivered to the planter in good condition, the next important step is to preserve the vitality of the tree. As soon as the trees are received the bundle should be opened up and heeled in or covered with wet hay or straw. Then in transferring the trees to the field a good plan is to prepare a barrel of water and clay mixed so as to make an adhesive mass, called puddling the roots. Place a few trees in the puddling barrel and let them remain until ready to set in the hole. Make an excavation for the tree at least two and one-half feet wide (three and one-half feet wide would be better) and three to four feet deep. Throw out the surface soil on one side and the subsoil on the other. If the subsoil is at all of an impervious nature it would be a good plan to take a posthole digger and make a posthole in the center of the excavation two or three feet deeper, going down beyond the impervious

subsoil strata. The excavation should be filled with a good quality of top soil sufficiently deep to permit the end of the roots of the tree to rest on the bottom. After this the excavation should be filled with water and allowed to soak away.

SETTING THE TREE

Set the tree and fill in around it with good moist top soil. Do not let any manure or fertilizer come in contact with the roots. The foregoing applies especially to all soils where the pecan is not native, or to soils that have an impervious subsoil near the surface. If the soil should be a deep alluvial, sandy, transported soil where the pecan grows well naturally, then so large an excavation is not necessary, and a hole sufficiently large to permit the planting of the tree with its roots in natural position is all that is necessary. After the tree is set the soil should be gradually filled in, and the tree made firm by tramping or ramming the soil around it. Be sure to avoid bruising the roots. A good plan to settle the soil around the tree is to flood the soil around the tree, and as the soil becomes saturated, slightly shake the tree sidewise and up and down so as to allow the soil to settle around the roots.

ROUNDING THE SOIL

After the tree is set and the soil settled, the soil should be well rounded about the tree and a trench formed a foot or two away. A month or two later water should be applied in sufficient volume to thoroughly saturate the surrounding soil as deep as the tree roots. After the water soaks away, and while the surface is still wet, dry earth should be applied so as to prevent evaporation. The first season is the critical period in the life of the transplanted tree.

A mulch of straw, hay, or old sacks filled with hay will prevent the rapid evaporation of the moisture and will also have a tendency to keep the ground around the tree protected from the direct rays of the sun as well as giving protection from the drying of the wind.

As soon as the soil becomes firm around your tree the top should be cut back severely, and the wounds covered with some good pruning compound. There are numerous compounds which may be used for this purpose. The paint manufacturing companies put out a splendid product for this purpose. Ordinary grafting wax is also good. Melted paraffin serves admirably, and may be applied with a small paint brush. Grafting wax for such use is sometimes made as follows: Two parts beeswax and one part rosin. Melt together and stir. After melting remove from the fire and add a small proportion of linseed oil to soften and keep the mass pliable.

referred to me your postal of February 16th. An inspection of the Weather Bureau Records of Trinidad, Colorado which has an altitude of about 6000 feet would seem to show climatic conditions there favorable for the hickory. I think pecans would grow there all right but I have doubts of there being sufficient summer heat to enable them to mature the nuts properly. Clay loam is the best possible soil for both hickories and pecans. I enclose you literature regarding the Association and copy of the accredited list of nut nurserymen.

WILLARD G. BIXBY.

March 1, 1922.

A. R. C., Virginia:

The American Fruits Publishing Co. has referred to me your letter of February 20th. Regarding the statement that you have heard that there is one variety of black walnut that comes reasonably true to variety of type from seed, I would state that I do not know of such. It may happen in isolated cases but generally when fine nuts are planted the trees from them will bear nuts much inferior to the nuts that were planted. In very rare instances they will be better but one has to raise trees by the thousands to get one that will bear nuts any better than the fine varieties we now have.

We find when we plant black walnuts by the thousands for the purpose of raising young trees to be grafted later, that some of the seedling trees will be very much more vigorous than others. For this reason discriminating Nurserymen discard quite a portion of these slow growing trees, some-

times 50% of the trees that came up in order to be sure to have vigorous stock on which to graft fine varieties. If you wish to raise seedling black walnuts to be grafted later, you would be perfectly safe in picking out nuts borne by a vigorous, prolific tree in your section, planting them in rows like potatoes and transplanting them after the first year so that they will be a foot and a foot and a half apart in the row. If you will discard the slow growing ones, you should have about 50 young seedlings ready for grafting. Grafting or budded vigorous seedling trees with scions from trees that bear fine nuts will be the only sure way of getting trees to bear those fine nuts. It is possible to buy trees that have been grafted to fine varieties. The Association has a list of Nurserymen who furnish these trees and would be glad to send you a copy should you wish. Experience and observations have convinced those who make a study of it that it is just as impossible to get seedling trees that bear fine nuts as it is to plant fruit tree seed and raise seedlings and get trees that will bear fine fruit. In either case they must be grafted or budded with scions from the trees bearing fine nuts or fruit in order to get trees that will bear fine nuts or fruit.

WILLARD G. BIXBY.

March 1, 1922.

An item in the last issue of the Journal stated that the A. & M. College, Texas, had written to county agent to secure specimen pecans from a tree of special interest, for propagating purposes. The item should have read scions instead of pecans.

The American Nut Trade: Market and Crop Reports

THE PECAN

TEXAS

Texas Pecan Exchange

The board of directors of the Texas Pecan Growers' Exchange met in Austin, Tex., last month, the following members being present:

J. W. White, Mason, president; J. W. Burkett, secretary; A. Caswell Ellis, Austin; P. K. Delaney, Seguin; W. R. Baxter, San Saba, and C. D. Jarratt, sales manager of the exchange, who made a report on the work of the last season. He said that 119,610 pounds of pecans were handled, the average price received being 15 25c a pound, f. o. b. loading point.

"The volume of business handled," said Mr. Jarratt, "is much less than was anticipated, and is in a large measure due to the late date at which the exchange started to function. It was the middle of October before the organization was complete and much preliminary work was necessary to get sales started. However, we laid the foundation for handling a considerable volume of business, much larger than we secured from the growers.

"The Texas pecan market for orchard run pecans opened at around 8 cents to 10 cents a pound. The market then slowly but gradually advanced until it reached 15 cents to 16 cents a pound the latter part of November. It then took a plunge downward and completely flattened out reaching the low point of 6 cents to 8 cents in some districts. I am convinced that this radical decline was entirely due to the numerous offerings of pecans by many people throughout the state. The market became completely demoralized.

PROFIT IN SHELLED PECANS

"Undoubtedly the largest percentage of profit arises from shelling the pecans and selling the meat. I recommend that the exchange install cracking machines, as well as a grading machine, and be prepared in another season to market the pecans in cracked form.

"I recommend also that local organizations of the pecan growers be formed to look after the concentration and loading of the pecans when they are ready for shipment to the concentration center or the point of destination; also that the concentration centers be established in several places in the pecan growing districts of the state. In my opinion an imperative demand exists for the systematic handling and marketing of this crop. To do it requires only initiative and the necessary activity. Millions of dollars are being lost by the Texas pecan growers by reason of the haphazard manner of marketing their product. This can be eliminated by organization and co-operation."

New Pecan Association

Erath County, Tex., Pecan Growers Association has been formed with these officers: Robert Slaughter, president; Louis Hollingsworth, vice-president; G. W. Jenks, secretary; Sam Grissett, Arthur O'Bryant, W. T. Darby, Joe Fitzgerald, Ross R. Wolfe, committee on program. Monthly meetings will be held.

The object of the association is to create a greater interest in pecan growing, by getting people who now own natural groves to bud them to varieties which have a constant bearing habit, and produce larger and better nuts than the wild trees now produce, and to get farmers to plant nuts on their upland sandy land farms, and bud them when they reach the proper size, as it is believed nut growing will be far more profitable than cotton or any other cultivated crop now grown in the county.

In Cameron park, Waco, Tex., pecan trees have been planted by Edmond Post of the American Legion, as memorials to fallen comrades. The idea originated with the Lions club.

When writing to advertisers just mention "American Nut Journal."

Pecans In Rio Grande Valley

El Paso, Tex., Mar. 7.—Inquiries by valley ranchmen at the agricultural department of the chamber of commerce, concerning growing of pecans are increasing, according to county farm agent Herbert C. Stewart. "I am glad to inform them," Mr. Stewart says, "that growing of pecans in the valleys is very profitable, and that the pecan industry in this section is very promising."

On the ranch of J. J. Smith, near Ysleta, is an orchard of pecan trees, 10 or 12 years old, producing heavily. There are trees at San Elizario at least 200 years old, it is believed, which are producing well.

A. F. Watkins, state orchard inspector, on a recent visit to the valleys here inspecting orchards for blight, is greatly impressed with the possibilities of growing pecans here. He says: "The El Paso valley is a veritable garden of Eden in respect to trees, for, backed by the Elephant Butte dam, which holds in check the largest artificial body of water in the world, and with a soil built up by fertile silt deposits in ages past, the soil undeniably contains all the items needed in tree growth."

Plantings are being made of the Western varieties including Texas Prolific, Burkett, San Saba, Halbert, Kincaid and Colorado. J. J. Smith is having good success with the James variety of the eastern pecan."

MEMBERSHIP DRIVE

National Nut Growers Association

\$2.00 Per Year—Limited Offer

By direction of the Executive Committee of the Association the Membership Fee has been reduced to \$2.00 for the limited period of the present Membership Drive.

REGULAR YEARLY RATES

Association Membership.....\$4.00
American Nut Journal..... 2.00

SPECIAL YEARLY RATES

Association Membership } \$3.25
American Nut Journal }

Address J. Lloyd Abbot, Sec'y.
Route 1, Spring Hill, Ala.

Makes Money for Roberts

J. B. Roberts, Stephenville, route 1, has a seedling pecan twenty years old on his place which produced 115 pounds of pecans in 1921, and he also has 20 trees grown from seed given him five years ago by Judge T. B. King, and all have done so well that he is now a pecan enthusiast, and is planting more seed, and will bud them to fine varieties at the proper age. If all farmers would plant a few seed and shade the young plants and cultivate them a little the first two years Erath county would soon be able to ship thousands of pounds of fine pecans, and enough could easily be grown to feed and clothe and educate all the children of the county without drawing on the proceeds of other crops. Its feasibility is unquestionable. It can be done.

All who own peach orchards should plant seed in the shade of the trees, and let them be coming on, for in time the peach trees will wear out. Buy a dime's worth of nuts, soak them two days in water, then place them in a box of damp earth. When they begin to sprout plant one or two inches deep where you want a tree. The trees should be 60 or 70 feet apart. The man who plants will reap rich rewards.—Stephenville, Tex., Tribune.

The pecan grove of B. I. Johnson, Monticello, Fla., of 2½ acres produced 2000 pounds of nuts last fall selling at \$1.120.

Census Figures and Texas Facts

Some remarkable figures are produced by Professor A. Caswell Ellis of the University of Texas, pecan expert, to show that Texas and other pecan states have a veritable gold mine in their native stock of pecan trees. He quarrels with the United States census figures at this point quite violently.

"The census," he points out, "estimates that Texas has less than two million wild pecan trees, which is three times as many as are in all the rest of the states combined. This same census gives Robertson county two thousand trees. I own one mile on one creek in Robertson county, and there are two thousand wild pecan trees on my place alone. Now this creek is fifty miles long in Robertson county, and besides there are half a dozen similar creeks in the county, and two rivers, the bottoms of which are to a greater or less extent filled with pecans. So I do not hesitate to say, neither do the experts of the Agricultural and Mechanical College and of the State Department of Agriculture, that there are probably ten to fifty times as many pecan trees in Texas as are enumerated in the United States census report.

"Think what this means!" added Professor Ellis enthusiastically, "if there are twenty million trees in Texas! By methods already proved, each of these trees may be made in three years to bear from twenty to two hundred pounds of superior nuts at a yearly average. Selling at 22 cents per pound, which is just one-half the present wholesale price, these comparatively worthless river bottom groves of Texas may be made to produce \$100,000,000 to \$200,000,000 annually, which is more clear money per year than is realized on the average from the Texas cotton crop, to say nothing of its presenting many thousands of individuals with an opportunity for economic independence, and a healthy, outdoor, avocation, just as it did me."

This pecan-growing expert does not believe present high prices for fancy nuts would be maintained if the twenty million pecan trees in Texas were bearing them. Of course not. A dollar a pound, the present retail price, a fancy price for a product suitable only for rich men's tables. Men of wealth buy them as a delicacy, and for presents to their friends. The great eating public does not think of buying pecans at a dollar a pound. But when you reduce this price for fancy nuts to 25 cents a pound, you are then competing with other foods—you are furnishing nourishment cheaper than butter at 50 cents a pound, and cheaper than beefsteak at 30 cents a pound. Professor Ellis makes it clear that, in his opinion, there is money in pecans not only as a rich man's luxury but as poor man's food.

When Dr. Ellis began budding and grafting, he got less than 20 per cent successful "takes," even with the help of the best local experts. He found that this wastage would be ruinous. He made a tour of the Southern Gulf states for the purpose of observing the most successful methods in use out of Texas. He returned after a wide study with the bark-grafted method which he developed to such an extent that he now gets 40 to 50 per cent successful "takes." He used also on the smaller limbs the "Jones patch-bud" a process developed by a Pennsylvania Nurseryman for walnut budding.

Pecan Trees Going Abroad

The Texas agricultural department has been advised that a shipment of pecan trees to Buenos Aires, South America, was received in good order and that the trees have been planted and are growing. The grafted portions of some of the trees, however, died during the trip, but the trunks and main body of the trees arrived in good shape. The department now has an order for pecan trees to be shipped to Australia.

Pecan Trees For Ornament

Brenham, Tex., March 3—Pecan trees of the Stuart variety have been planted in the lawns at the Fourth Street Methodist Church and at the First Baptist Church. The various churches in Brenham and those in the county are interested in pecan culture, and they, too, will plant pecan trees.

GEORGIA

Albany Exchange Crackery

The Albany, Ga., District Pecan Exchange has added the cracking of pecans to its activities, at present employing 100 men and women in this work. It is expected gradually to increase this force, until next autumn when the Exchange's new building will be completed and there will be 200 persons employed.

For several years the Albany District Pecan Exchange has been engaged in grading, curing, packing and selling of pecans. Its business has been increasing each year, and now it has assumed such large proportions that it has large quantities of medium grade nuts which it is more profitable to crack, selling the meats, than to sell whole.

Extreme care is taken to have this work done in sanitary manner. All the workers engaged in picking out nut-meats are required to wear clean white aprons and caps, and to cleanse their hands thoroughly with an antiseptic preparation before beginning work.

Hand cracking machines are used exclusively at present, though later some electrically operated machines will be installed. The electric machines crack a maximum of 600 pounds of nuts each per day. Two young men on the exchange's nut cracking force, using hand machines, crack more than 300 pounds each daily. These machines crack the nuts in such a manner that the meats come out whole.

The new plant of the exchange will be erected on the corner of Jackson and North streets, on a lot purchased last year by the concern, which is a co-operative marketing organization, headed by W. P. Bullard, and getting its supply of nuts from Georgia, as well as parts of Florida and Alabama. Its nuts are distributed through the National Pecan Growers' Exchange, of which Mr. Bullard is also president.

New Pecan Nursery

Sam C. Patterson, manager of the Milledgeville Nursery Company, Milledgeville, Ga., has just finished planting 2,300 pounds of pecans, using about thirteen acres of land, and later intends to plant more acres in seed. From these he expects to grow two hundred and fifty thousand trees. The Nursery will be extended to include 50 acres. The corporation is capitalized at \$10,000. Next season a large peach Nursery will be added. As a member of the firm of Edwards & Patterson, Mr. Patterson has long been known as a pecan grower.

A bill appropriating \$25,000 for establishment by the department of agriculture of an experiment station to develop pecan nut culture was introduced in Congress Feb. 5th by Senator Harris, Democrat, Georgia.

Thomson, Ga., March 7—Ira Brinkley and J. Q. West have planted 1000 pecan trees here this spring. Others are planning to plant pecan trees.

OKLAHOMA

Although only a third of a crop of pecans was harvested this year, nearly \$5,000 has been paid to Wagoner, Okla., county farmers for the nuts, according to estimates gathered from the various buyers.

Why not replace the shade trees of Muskogee with those of the nut bearing families? This question is exciting no little discussion and comment at this time and the plan seems feasible from a practical standpoint. —Muskogee, Okla., Times-Democrat.

Fire recently destroyed the three story plant of the Ardmore, Okla., Nut Company, one of the largest shippers of pecans and peanuts in the country. The loss was estimated at \$100,000.

PERSIAN WALNUT

Vacuum-Packed Walnut Meats

As an opening wedge and preliminary to the advertising campaign covering walnut meats packed under vacuum in tins soon to be launched, the California Walnut Growers' Association, through its brokers, Wood & Stevens, has sent out a circular to the jobbing trade. The letter explains that the association receives walnuts as they come from the growers as orchard run and this stock must be sorted and resorted to eliminate the nuts which are of poor appearance or partially filled. Out of last year's crop, the association sorted out nearly 9,000,000 cull walnuts.

The circular continues: "Many of these culls, while being of poor appearance, contained perfect meats. Others contained half a good meat. Others were wholly bad. The association has for years been operating three cracking plants on the Pacific Coast where these cull walnuts are cracked and the good meats salvaged. It has just completed a new eight-story concrete warehouse and factory in Los Angeles where over 700 women are engaged for half the year in grading and sorting diamond walnut meats. Practically all of the association's meats are packed in vacuum either in 3-ounce jars or 8-ounce tins. The vacuum sealing process of packing insures that the meats will keep almost indefinitely in the unopened glass or tin. Tests have shown that meats packed three years and subject to the changing weather conditions of California have not deteriorated in the least.

"The average retail grocer does not handle walnut meats in the bulk because they will keep only a short time without becoming stale and rancid and against that losses through upweights, pilferage and dissatisfied customers. On the other hand diamond vacuum glass and tin packages insure him against all of these evils and are a real profit maker. The association put these packages on the market three years ago and has had unusual success with them."

Big Walnut Orchard

Stockton, Calif., March 4—Planting started last month on the 320 acres to be developed into a walnut orchard in the Bellota section by Joseph Geiger, W. C. Anderson, L. F. Grimsley, W. A. Macnider, E. F. Davis and Delthich & Liestner, all well-known in Stockton.

The 16,000 black walnut trees have been planted in square formation 41 feet apart with one tree interplanted in the center of each square. All these trees will be budded with Paynes the second year and those that fail to respond will be budded again the third year. The orchard has two pumping plants for irrigation.

Turkish Walnuts

The export demand for Turkish walnuts continues strong and dealers are having difficulty in filling orders, according to a report to the Department of Commerce by the secretary to the Commercial Attache at Constantinople.

In pre-war years the average crop of walnuts in Asiatic Turkey was between 33,000,000 and 34,000,000 pounds, but the 1921-22 crop is estimated at only 1,000,000 to 1,200,000 pounds. About a third of the new crop will be sold as shelled nuts.

The walnut crop is the second most important nut crop in Anatolia. The number of bearing trees at the beginning of the world war was approximately 300,000. The number is considerably smaller at present, owing to the damage to trees occasioned by the continued state of warfare in that section of the country.

Walnut Aphis—The control method, which has been worked out by Prof. Ralph Smith of the California College of Agriculture, is to apply a dust prepared by the California Walnut Growers' Spray Manufacturing Company, which contains nicotine, the killing agent. This is applied with a power duster during the spring of the year, when the aphids become active. This material, which is called "Nicodust," is applied two to five pounds per tree, depending upon its size. Nicodust costs approximately 9½ cents per pound.

If it relates to nut culture it should be in the AMERICAN NUT JOURNAL. Please let us know.

Another Patriarch

Dr. W. B. Palmer, Furman, Ala., directs attention to a pecan tree thus described in a recent issue of the Montgomery, Ala., Advertiser:

Another ancient pecan tree has been found by Miles M. Dawson near Montgomery, still bearing a good crop of nuts and apparently as vigorous as any young tree. This one is on the farm of James Mark Scott, about a mile from Mt. Meigs. The family has a record of the tree being planted one hundred years ago by Thomas B. Scott, son of General Scott, who gave the land for Oakwood Cemetery to the city of Montgomery. The present owner of the farm is the great-grandson of the general.

The trunk of this tree is twelve feet in circumference and the spread of the branches is one hundred and twenty feet. As late as December 8 the tree was in full foliage and has apparently never suffered any storm or insect damage, its branches being symmetrical and giving complete shade over a space as big as a city building lot. In conformation, vigor and crop, this pecan is the finest type of growth from a seedling in the country. The apparent capacity of the tree is 1,000 pounds of nuts, but the owners have never kept track of the annual crop until this year and more than 500 pounds of nuts have been gathered so far, with a considerable part of the crop still on the tree. The nuts are small, but of fine flavor. Mr. Dawson says that if the pecan had been one of the standard varieties giving the size of nuts for which there is a commercial demand, the tree would be worth \$4,000. Mrs. Scott, who is very proud of the tree, believes that it is the oldest pecan anywhere in the Montgomery neighborhood.

20,000 Acres For Nut Trees

That there are 20,000 acres of land in Macon county which can be profitably planted to nut trees, land which is now only used for pasture, that the drives and bluffs encircling Decatur's new lake should be planted to nut bearing native trees and that every farm home should have about it such trees were some of the arguments which H. D. Spencer, a lover of trees and a student of the nut bearing varieties, advanced in his talk given at the farm bureau building.

Mr. Spencer also had lantern slides only recently made by the United States department of agriculture showing nut bearing trees of many varieties in different parts of the country.—Decatur, Ill., Review.

Plant Nut-Bearing Trees

There is a county in England where all the roadsides have been planted to damson plums which have not only made the landscape more beautiful, but furnished many tons of plums that were picked half ripe for the manufacture of dyes that became scarce owing to the war.

If such a movement as this had been taken in this country in the planting of nut trees in former years, our roadsides would be more beautiful, the country more healthful, the farmer more independent, having these crops that require little labor and that could be marketed at leisure. Our soldiers might have had sealed cartons of nut meats included in their rations on the European battle fronts that would have been acceptable as food and have added little weight to their packs.

Unfortunately the tree has not been much used as yet for crops yielding staple food in places where men till the soil. They begin with crops which return annual results in exchange for labor. Now that the crops from annual plants are becoming smaller every year in proportion to the increased number of inhabitants, men will set great trees at work upon millions of half barren acres. These trees will return a larger profit for less labor than would be required for annual plant crops. People have not found it out as yet.—Pittsburgh Dispatch.

A movement has been started in Brownwood, Texas, to establish an annual Pecan Exposition, and to start next fall.

Nut Culture Information

Reprint folders on topic discussed in American Nut Journal. 10 Cents Each

Grafting and Budding the Walnut—U. S. Dept. Agriculture.
Pecan Areas of the United States—W. P. Reed.
Walnut Trees For New England—Dr. Robert T. Morris.
Some Walnut Varieties—Dr. L. D. Batchelor.
Chip Buds For Nut Trees—Charles L. Edwards.
Grafting, Budding, Topworking—Dr. W. C. Deming.
Breeding Chestnuts for Disease Control—U. S. Dept. Agr.
Advent of Nuts as Staple Food—Dr. J. H. Kellogg.
Pecans As An Investment—Herman C. Locke.
Underworking Nut Trees—Charles L. Edwards.
The Ubiquitous Black Walnut—T. P. Littlepage.
Average Yield of Pecan Orchard in S. W. Georgia.
Value of Nuts As Food—Dr. W. C. Deming.
Improved Black Walnut a Good Investment—Henry Stabler.
Status of Pecan Industry—C. A. Reed, U. S. Nut Cultivist.
Grafting Tardy Walnut Trees—Judge Charles L. McNary.
Pecan Varieties for the South—C. A. Simpson.

Sources of Supply of Hazel Nuts—Bulletin Imperial Institute.
Top-Grafting the Walnut Tree—Ferd Groner.
Black Walnut As a Meat Producer—Henry Stabler.
Outline of Northern Nut Culture Activity—Dr. W. C. Deming.
Establishing the Filbert Grove—George Dorris.
Top-Working Northern Pecan Trees—J. F. Wilkinson.
Nut Trees for Highways and Public Places—W. S. Linton.
American Nut Culture—24-page Pamphlet Survey.
East Texans Reap Fortunes on Pecans.
Hazel Blight—Dr. Robert T. Morris.
American Nut Industry—C. A. Reed, Nut Cultivist.
What Nuts to Plant in Northern States.
Pecan Rosette; Practical Treatment—W. A. Weaver.
English Walnut: Where To Plant It.
Nut Tree Grafting by an Easy Method—Dr. Robert T. Morris.
Purchase of Chestnut Tree With Reference to Blight—G. F. Gravatt.
Quick Results in Pollenizing Pecans—E. E. Rislen.
Nut Trees to Reduce Food Costs—Chas. Lathrop Pack.

AMERICAN FRUITS PUBLISHING CO., 39 State Street, Rochester, N. Y.

ALL INTERESTS CO-OPERATING

ATENTION to the mutual interests in the Nut Industry is succinctly directed by Manager T. C. Tucker of the California Almond Growers Exchange: "We are a strictly co-operative organization, including Grower, Broker, Wholesaler and Retailer."

This may be said also of organized effort in the production and distribution of Walnuts and Pecans, each of which is represented in Associations.

It is because of this co-operative feature that the American Nut Journal combines the news of the Nut Industry in the fields of Production and Distribution. Its Market and Crop Reports will be of increasing value.

It is of prime importance that the market shall be supplied; a supply is the basis upon which a market exists.

It is also of prime importance that a market be created and maintained; distribution of the product is what makes the industry.

The Journal desires to co-operate heartily with producer and distributor, and to that end welcomes frequent communications by way of comment on current events, personal mention, trade news and suggestions. It is the logical medium for interchange of trade comment and the recording of trade activities.

A NEW BOOK!

NUT GROWING

By Robert T. Morris

The latest and only up to date book on the newest and one of the most important branches of Horticulture, giving a broad survey of a rapidly growing industry. Detailed explanation of successful methods of propagation and the new process of grafting with the use of paraffin; illustrated.

An invaluable work for all nut growers.

Price. \$2.65, Postpaid

AMERICAN FRUITS PUB'G. COMPANY
39 State Street, Rochester, N. Y.

BUDDED and GRAFTED

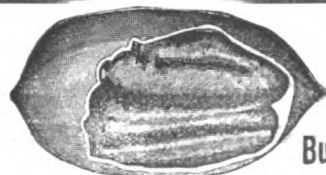
Nut Trees

Start right with my hardy Pennsylvania grown trees and be assured of success.

Attractive Catalogue Free.

I have this season a fine lot of stake trained Pecan, English Walnut, Black Walnut and Persimmon trees budded on root pruned transplanted stocks, that will please you and that will transplant easily and early. Write for catalogue.

J. F. JONES, The Nut Specialist
LANCASTER, PA.



"The
Pecan
Business"

NEW EDITION FREE

A practical guide showing how to bud pecans. Tells how to grow trees 12 inches in diameter by the end of the 8th year, which yielded 400 lbs. nuts per acre.

Trees, Nuts, Groves for sale direct without agent at attractive reduced prices
B. W. STONE, Thomasville, Ga.

An Unexcelled Medium

FOR ALL NUT ADVERTISING

The "American Nut Journal" is the only national publication devoted to Nut Culture in all its phases. It circulates throughout this country and abroad.

Advtg. Rate: 20c per line, \$2.80 per inch

American Fruits Publishing Co., Inc.
39 State St., Rochester, N. Y.

NUT TREES TOPWORKED

Inspections and Consultations in Northern Nut Culture

Dr. W. C. Deming Georgetown, Conn.

Texas Pecan Nursery Arp, Texas

THE PEOPLE THAT GROW
WELL-ROOTED PECAN TREES

"IMPROVED METHOD OF WALNUT GRAFTING"

Endorsed by Luther Burbank as the Best.

Price: \$1.00 Postpaid.
C. R. BIEDERMAN, HEREFORD, ARIZONA

Budded and Grafted HARDY NORTHERN NUT TREES

Best varieties, grown in natural nut soil. Send for catalog. Have your seedling nut trees topworked to these fine varieties.

Information and estimate on request.

INDIANA NUT NURSERY
Rockport. J. F. Wilkinson, Prop. Indiana

THIS SPACE
\$2.50 Per Month Under yearly
Contract
Under less than yearly term:
\$2.80 Per Month

SUCCESS

and other leafing varieties. Also citrus
BECHTEL PECAN NURSERIES

Ocean Springs, Miss.

GRAFTED PECAN TREES

ALSO BUDDED ROSES and SATSUMAS

We Solicit Your Inquiries

Carol Plantation Nurseries,
THEODORE, ALA.

HALES HICKORY

Grafts obtained direct from original tree, are on Northern pecan roots. Have pecan trees also.

SIMPSON NURSERY CO., MONTICELLO, FLA.

PECAN TREES

Plant them this year! Buy direct from nursery and save agent's profit. All standard varieties; quality and service the best. Write us for prices.

FLORIDA NURSERIES

W. W. Bassett, Prop., Monticello Fla.

AMERICAN NUT JOURNAL CHIEF EXPONENT OF AMERICAN NUT INDUSTRY

Of National Circulation

Covering Every Phase of Nut Culture

Subscription: - - \$2.00 Per Year
Advertising: - - \$2.80 Per Inch

Official Journal { National Nut Growers Association
Northern Nut Growers Association

AMERICAN FRUITS PUBLISHING COMPANY

39 State Street, Rochester, N. Y.

American Nut Journal

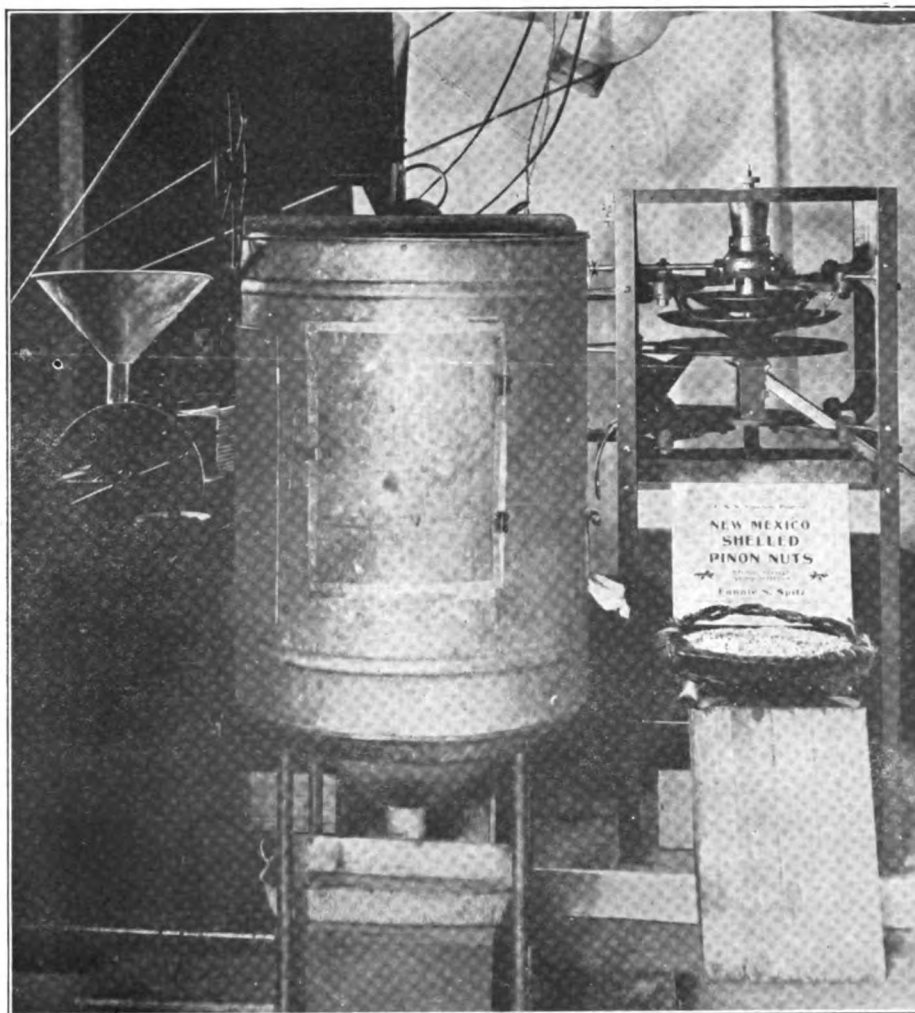
**DEVOTED TO NUT GROWING INTERESTS
GENERALLY THROUGHOUT THE AMERICAS**

Vol. XVI, No. 4

APRIL, 1922

Per Copy 20c.

PINON NUT INDUSTRY REVOLUTIONIZED



THE F. S. S. SUNSHINE CRACKER AND SEPARATOR
Invention of Fannie S. Spitz, Alburquerque, N. M.
See Page 44

39 STATE ST.



ROCHESTER, N. Y.

American Fruits Publishing Co.

Demand For Alabama Pecans

Successful Grower's Experience With Marketing

By J. A. KERNODLE, Camp Hill, Ala. in Alabama Farm Facts

You asked me to write on pecans, there are so many good things that I could say about a pecan orchard and especially the nuts, I hardly know where to begin.

The first and most interesting thing that comes to my mind is the cash that I have received for pecans this winter, while all other farm products are selling below cost of production and hard to sell at any price. I am getting from 50c to \$1.00 per pound for my specimens. I believe that I did sell one small lot of off varieties at 40c, but my average will be near 70c per pound.

I can grow a pound of pecans as cheap as a pound of cotton, as we grow them both on Pecan-odle Farm and at this time no one wants our cotton, while I am getting letters from every state in the Union and some from Canada, wanting my pecans.

I am selling both pecan trees and nuts to my neighbors, and to some who only a few years ago had no faith in pecan growing and tried to discourage me.

While last year was a poor year for pecans on account of excessive rains during the blooming season, we gathered as many as 50 pounds from some trees eight and nine years old, a twelve-year-old tree in my yard at Camp Hill has borne from 25 to 60 pounds a year for five years, paying from \$15.00 to \$30.00 each year for the privilege of standing there making shade in summer and dropping its load of fine nuts in the fall. How any man who owns a home anywhere in Alabama can afford to let this season pass without planting some pecan trees around his home is more than I can understand.

A tree that will begin bearing in three or four years after it is planted and continue to bear increasing crops of the finest nuts in the world for 50 years or four times 50 for all we know, I say that there is no way to estimate its value.

I have attended nearly all the meetings of the National Nut Growers Associations and visited several pecan orchards throughout the South and have never seen or heard of a dead pecan tree that died of old age, but I have seen one tree 30 years old that bore 900 pounds of nuts in one year. While thousands of pecans trees are being planted every year in the South I do not believe that the time will ever come when the finest varieties will not be in demand at profitable prices.

I have shipped nuts to Los Angeles, California, for two years, where they have made millions of dollars out of English walnuts and the man said that they were the finest nuts ever seen there and that he could sell in Los Angeles all that I could raise at a profit over what he paid me. I got \$1.00 per pound for them f. o. b. Camp Hill, Ala. Of course I sent him none but the finest nuts; you can grow the finest kind as easily as any, if you set good trees of the right varieties and let me say right here that a first class tree planted and properly cared for, is by far the best investment you can possibly make regardless of what it costs, and a poorly grown and carelessly dug and poorly packed tree for shipment is dear at any price.

That we have land here in Alabama that will grow as fine pecans as any in the world has been thoroughly demonstrated. Pecans from Pecan-odle Farm in Tallapoosa county have taken premiums at every fair exhibited.

I understand that land in California suitable for growing English walnuts costs from \$300.00 to \$600.00 per acre and that the walnuts do not bring half as much as our best paper shell pecans. We have land here in Alabama that can be bought from \$35.00 to \$100.00 per acre according to location, that will grow the finest pecans and if good trees are planted and properly cared for, in ten years can be made worth from \$800.00 to \$1000.00 per acre and making farming pay right in the orchard while the trees are growing.

On Pecan-odle Farm we believe in diversified crops, we plant peas or soy beans in drills under trees, corn and velvet beans in between the rows of trees, gather corn early and let hogs have run of the orchard until the nuts begin to drop, then turn in cattle

until field is eaten out. By Christmas the nuts are all gathered, then let stock hogs come back to finish up any beans the cattle have left and graze on rye and clover that was planted under trees in fall, by turning under legumes grown under the trees you have a clean strip to gather nuts on, as you see that pecan growing and stock raising work so nicely together and your land is improving all the time.

All of February is good for pecan planting, and if cotton farmers will cut their acreage to not over a third in cotton to plow, plant some pecan trees, just as many as he can afford, and raise some stock and all his feed stuff at home there is no reason why he should not be prosperous, and the pecan trees would not only be a paying investment to him while living but a monument to his good judgment and forethought when gone, and his children and children's children will grow up to call him blessed. Remember this generation does not know how old a pecan tree will live to be.

Why Not Plant Pecan Trees

When one considers that the pecan tree not only is easy to plant and no trouble to rear, that it provides a splendid shade, and at the same time is a wonderful income producer, it is hard to understand why every one that has a plot of ground to call their own fails to plant a pecan tree, says the Augusta, Ga., Chronicle.

There is a woman in New Orleans who supports herself on the income from one single tree that produces perfect thin shelled nuts.

The subject is gone into at length and with great interest on the editorial page of the Florida Times-Union as follows:

"In the planting of shade trees for city residences and streets there is apparent a disposition to select trees which serve more than one purpose. There is none other will answer the demand for a tree which will be handsome, afford a dense shade and furnish an article of food as well as does the pecan. At the same time there is none other that furnishes a nut so much in demand as the pecan nut, as is shown by the large prices asked for them, sixty cents to a dollar a pound.

"The pecan, being a species of hickory and native to the South, is very hardy and can be grown with the minimum of trouble. It is a hardwood, bears a close fitting bark and has a strong tap-root which it sends deeply into the soil to provide itself with moisture. Therefore, it is well prepared for all extremes of weather. It has few insect enemies, though last year's experience taught many growers that it has some.

"This nut tree rivals the citrus tree in longevity and productiveness. While plants of some varieties have been known to produce a few nuts in two or three seasons from the nursery, twenty-five pounds have been gathered from a five-year-old tree and the production increases until a tree twenty years old will produce 900 pounds. Thus it will go on producing at this rate for a century or two, continually increasing in size and value.

"The fruit, the nut, is exceedingly popular. The price proves the demand and the latter bids fair to continue to increase as fast, or faster than the supply, even if thousands of trees are planted every year. It does not take so many nuts to make a pound yet persons pay the high prices named for them because of their peculiar and delightful flavor. The demand, in fact, grows wherever the nut becomes known. And yet, it grows to perfection only in the South.

"There is reason in the popular fancy for these nuts. Dr. J. H. Kellogg, of Battle Creek sanitarium, says a pound of them is equal in nutritive value to two pounds of pork chops, three pounds of salmon, two and a half pounds of turkey or five pounds of veal. As an after dinner nut it has no equal for, instead of producing a sense of fullness as do most others, it seems to "settle" a full meal and promote digestion.

"The pecan is hardly known abroad, even by reputation. When foreigners become aware of its virtues even the great planting of recent years will not be able to meet the demand which will develop for export.

"Therefore, one can hardly make a mistake in planting a few trees on his city lot to supply the luxuries of agreeable shade from a handsome tree and a valuable and agreeable food besides."

EXPERIMENT STATION'S FUNCTION

In an outline of what he characterized as his very definite views with reference to the functions of state agricultural experiment stations, Dr. R. D. Thatcher, director of the New York State Experiment Station, Geneva, N. Y., addressing the New York State Horticultural Society, in session at the station early this month, said:

It is clearly the purpose and duty of the experiment stations which are established and supported by public funds to carry on scientific, impartial and unbiased investigations of those problems which are of general public interest rather than those which are of purely personal or individual value. The latter ought to be provided, or at least paid for, by the persons who will profit by them. In the field of agriculture, therefore, the publicly supported experiment stations ought to study those problems the results of which will have the application on many farms throughout the state or nation. To be sure, the results of such studies will be used to the personal advantage of many individual farmers, but the studies themselves ought to be carried on in such a way as to discover the fundamental facts in connection with the problem at hand, and the results of the investigations ought to be published in such a way that teachers of agriculture, county agents, and individual farmers can understand and put into practice the principles which have been established by the careful and disinterested scientific study of the problem at the station.

Those views conform exactly to the proposition by the Northern Nut Growers Association that the experiment stations generally should take special interest in establishing nut tree plantations for experimental purposes. The object of such work and the expected results pertain exactly to what Dr. Thatcher outlines as the function of an experiment station. At every convention of the Northern Nut Growers Association, one or more representatives of experiment stations might be invited to speak on the subject.

Walnut Shell Charcoal

The charcoal plant completed some months ago by the Walnut Growers Spray Manufacturing Company has proven highly successful and is turning out daily a large tonnage of charcoal so highly favored by makers of chicken and hog mashes that it commands a premium in price over any other product in the same class.

The plant has been in operation, with only minor stops, day and night for many weeks and has many interesting features. For instance, no outside fuel whatever is used, although a furnace temperature of 1200 degrees Fahrenheit is necessary to char a capacity tonnage of shells. This heat and, in fact, a temperature reaching 2500 degrees is furnished by a furnace fed entirely by the smoke and gases coming from the charring shells.

The shells, which are fed into the charring drum at the rate of 25 lbs. per minute, come out at the other end charcoal at the rate of 8 lbs. per minute, the balance of the weight going into the furnace in the form of gas and smoke. The charcoal is spread from six to twelve inches deep on a cement floor, where it is allowed to cool for 24 hours, and then packed in 50-lb. burlap bags with heavy paper liners ready for delivery.

In Bulletin 933, a professional paper by the U. S. Forest Service, the growth and management of black walnut timber is discussed. In reviewing the present supply of this valuable wood the specialists estimate roughly that there are 821,000,000 feet of black walnut in this country. The figure is approximate only, and it is well to remember that only 50 per cent of it is available to commerce. The remaining 50 per cent is growing in inaccessible spots, or is held by owners who refuse to sell.

J. H. Burkett, Clyde, Texas, reports shipment of Nursery grown pecan trees to Melbourne, Victoria, Australia, and to Argentine, South America.

Just mention AMERICAN NUT JOURNAL.

AMERICAN NUT JOURNAL --- APRIL, 1922

EDITORIAL DEPARTMENT—Communications on any subject connected with Nut Growing and Distribution are cordially invited by the editor; also articles on this subject. We shall be pleased to reproduce photographs of trees of interest, methods and scenes connected with the Nut Industry; portraits of individuals, etc. Suggestions are cordially welcomed.

ADVERTISING—Advertising forms close on the 10th of each month. If proofs are wanted, copy should be in hand on the 1st.

Advertising rate: 20 cents per agate line; \$2.80 per column inch for any amount of space.

Advertisements that do not represent reliable concerns will not be accepted.

SUBSCRIPTIONS—The "American Nut Journal" will be sent to any address in the United States for \$2.00 a year; to Canada or abroad for \$2.50 a year. Three years: In United States, \$6.00; Canada, \$6.50.

Add ten cents for exchange unless bank draft, express or postal money order is used.

WHAT THIS JOURNAL STANDS FOR—Reliable information on all phases of the Nut Industry. It is for the advancement of Nut Growing in general; it is in no way confined to the interest of a particular kind of nuts, nor of a particular section. It is broad in scope and absolutely independent. The aim of "The American Nut Journal" is to stimulate thousands of persons into developing interest in one of the greatest food supplies of the future—to line the roadsides and fill the waste places with trees of a sort which yield dollars worth of fruit every year instead of the mere bunches of leaves resulting from present shade and ornamental planting. At the same time it will record the progress of the industry, the latest descriptions in the note book of the biologist and plant physiologist, the rapidly expanding knowledge of methods, the increasing acreage, and in short the news as it develops of an industry whose importance is recognized by an increasing number of persons in all sections.

Entered as second-class mail matter June 6, 1914, at the post office at Rochester, N. Y., under the Act of March 3, 1879.

AMERICAN FRUITS PUBLISHING COMPANY, Inc.

Ralph T. Olcott, Editor and Manager

121-123-125 Ellwanger & Barry Bldg., Rochester, N. Y.

Classified Business Announcements In This Issue.

Bassett, W. W. Pecan Trees	50	Nut Information Special Topics	43
Bechtel's Pecan Nurseries... Grafted Pecan Trees.....	50	Nut Industry For Sale..... Pinon Sheller-Separator	45
Florida Nurseries Pecan Trees	50	Nuts as Staple Food..... Dr. J. H. Kellogg.....	43
Indiana Nut Nursery..... Northern Pecan Trees.....	50	"Nut Trees for the North". Expert Advice	43
Jones, J. F. Grafted Nut Trees.....	52	Simpson Nursery Co..... Hale's Hickory	50
Lancaster Nut Nurseries... Northern Nut Trees.....	52	Stiles, Harvey C..... Tree Expert	52
Gulf Coast Orch. Synd.... Manager Wanted	50	Stone, B. W. Pecan Trees, Nuts, Groves.....	50
"Nut Growing" New Book	48	Texas Pecan Nursery Budded Pecan Trees	50
		Wilkinson, J. F. Grafted Pecan Trees.....	50

IMPORTS OF NUTS INTO THE UNITED STATES, FOR CONSUMPTION, DURING THE LAST THIRTEEN YEARS (Compiled by Bureau of Commerce and Navigation, Department of Commerce, Especially for the "American Nut Journal.")

KIND	1907	1908	1909	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919
Almonds—not shelled.....lbs.	5,714,207	8,515,688	2,120,632	6,810,056	3,762,654	5,242,563	2,363,860	5,501,059	4,684,598	2,368,369	4,901,168	6,149,374	7,482,538
Shelled.....lbs.	8,717,952	8,556,162	8,538,054	10,485,750	12,160,636	11,682,988	12,655,057	13,896,621	12,168,153	13,210,668	18,180,258	21,544,757	28,007,908
Apricots and peach kernels lbs.				27,854	13,551	7,939	18,769	18,572	67,164	11,926	250,075		
Coconuts in the shell.....Dollars	\$1,349,380	\$1,439,539	\$1,246,463	\$1,298,970	\$1,704,262	\$2,012,203	\$1,793,713	\$2,150,500	\$1,593,666	\$1,891,328	\$2,583,580	\$2,490,368	\$4,003,282
Coconut Meat broken or Copra not shredded, desiccated or prepared.....lbs.	7,064,559	14,121,576	23,742,518	20,830,539	38,081,984	64,505,787	34,283,592	44,459,158	88,090,382	108,507,765	247,043,127	430,649,332	258,637,781
Desiccated, shredded, cut or similarly prepared.....lbs.	3,476,698	5,584,662	5,461,602	5,985,308	6,561,850	5,396,465	6,826,095	9,307,924	5,866,806	7,947,360	10,491,796	20,269,909	29,637,674
Cream and Brazil.....bu.	280,633	310,418	409,644	461,496	277,679	21,601,008	11,933,139	11,431,531	21,493,319	12,489,217	16,283,023	11,282,068	43,076,365
Filberts—not shelled.....lbs.	9,960,290	8,997,246	7,365,837	10,026,961	10,084,987	8,375,960	8,586,278	10,36,072	10,822,248	10,003,552	16,468,547	7,432,524	16,747,349
Shelled.....lbs.	1,553,332	1,343,594	1,384,689	1,413,391	2,332,606	1,368,835	1,450,620	1,798,147	1,722,705	1,259,540	2,280,757	4,245,963	3,778,906
Marrons, crude.....lbs.				10,270,398	9,968,879	14,845,345	10,157,321	18,849,257	12,549,959	15,754,796	6,275,030		5,021,146
Olive nuts, ground.....Dollars	\$1,016	\$1,027	\$590	\$178	\$236	\$206	\$312	\$385	\$25	\$112	\$420		
Palm and Palm Nut Kernels "	\$3,350	\$2,250	\$2,752	\$6,907	\$5,744	\$7,970	\$4,872	23,127	31,900	1,104,885	626,435	16,905,313	5,610,056
Peanuts or Ground Beans.....lbs.	10,432,828	6,498,202	7,326,371	11,297,172	11,055,823	12,660,433	12,140,612	17,298,778	14,075,387	9,623,411	7,710,082	1,970,797	5,667,384
Shelled.....lbs.	4,790,054	1,775,946	1,302,919	16,089,919	7,821,505	3,127,829	7,823,173	21,819,101	11,695,507	18,739,888	27,548,928	67,746,851	24,179,687
Peanuts.....lbs.	1,118,071	1,480,289	3,349,460	2,333,037	2,607,227	1,803,434	2,621,161	2,032,539	2,032,539	1,265,382	4,076,933		
Walnuts—not shelled.....lbs.	23,036,646	21,427,853	17,432,885	23,269,974	21,146,116	22,208,945	16,363,046	16,134,211	20,984,326	22,610,418	17,177,992	3,304,003	21,235,078
Shelled.....lbs.	7,199,988	7,098,958	8,781,908	10,960,988	11,244,054	10,713,286	10,093,622	11,636,053	10,552,956	13,445,790	12,257,583	9,707,401	10,260,899
All other shelled or unshelled, not specially listed.....lbs.	10,598,186	10,441,327	9,938,337	3,584,544	2,962,663	3,050,989	3,600,056	7,426,313	3,272,492	2,772,589	2,769,634		
Total of nuts imported Dollars	\$9,315,891	\$9,563,742	\$8,549,997	\$12,775,196	\$14,265,572	\$15,626,485	\$13,508,307	\$19,815,713	\$16,865,244	\$20,594,434	\$33,697,688	\$49,930,283	57,499,04

a—pounds.

Nut Culture Information

Reprint folders on topic discussed in American Nut Journal. 10 Cents Each

Grafting and Budding the Walnut—U. S. Dept. Agriculture.
Pecan Areas of the United States—W. P. Reed.
Walnut Trees For New England—Dr. Robert T. Morris.
Some Walnut Varieties—Dr. L. D. Batchelor.
Chip Buds For Nut Trees—Charles L. Edwards.
Grafting, Budding, Topworking—Dr. W. C. Deming.
Breeding Chestnuts for Disease Control—U. S. Dept. Ag.
Advent of Nuts as Staple Food—Dr. J. H. Kellogg.
Pecans As An Investment—Herman C. Locke.
Underworking Nut Trees—Charles L. Edwards.
The Ubiquitous Black Walnut—T. P. Littlepage.
Average Yield of Pecan Orchard in S. W. Georgia.
Value of Nuts As Food—Dr. W. C. Deming.
Improved Black Walnut a Good Investment—Henry Stabler.
Status of Pecan Industry—C. A. Reed, U. S. Nut Culturist.
Grafting Tardy Walnut Trees—Judge Charles L. McNary.
Sources of Supply of Hazel Nuts—Bulletin Imperial Institute.
Top-Grafting the Walnut Tree—Ferd Groner.
Black Walnut As a Meat Producer—Henry Stabler.

Outline of Northern Nut Culture Activity—Dr. W. C. Deming.
Establishing the Filbert Grove—George Dorris.
Top-Working Northern Pecan Trees—J. F. Wilkinson.
Nut Trees for Highways and Public Places—W. S. Linton.
American Nut Culture—24-page Pamphlet Survey.
East Texans Reap Fortunes on Pecans.
Hazel Blight—Dr. Robert T. Morris.
American Nut Industry—C. A. Reed, Nut Culturist.
What Nuts to Plant in Northern States.
Pecan Rosette; Practical Treatment—W. A. Weaver.
English Walnut: Where To Plant It.
Nut Tree Grafting by an Easy Method—Dr. Robert T. Morris.
Purchase of Chestnut Tree With Reference to Blight—G. F. Gravatt.
Quick Results in Pollenizing Pecans—E. E. Rislen.
Nut Trees to Reduce Food Costs—Chas. Lathrop Pack.
How To Guard Against Faulty Nuts—Harvey C. Stiles.
The Romance of the Pinon Nut Industry In New Mexico
Soil Fertility; Fertilizer Problems in Pecan Culture—J. J. Skinner, U. S. Department Agriculture.
The Future of the American Grown Filbert—Richard H. Turk.

AMERICAN FRUITS PUBLISHING CO., 39 State Street, Rochester, N. Y.

To Supply the Sweet Tooth of a Nut-Eating Nation

The Romantic Story of the Pinon Nut, a Volunteer Product of the Scrubby Pines Which Clothe the Sunny Mountain Sides of New Mexico, Arizona, Colorado, and Utah, Gathered by Indians, Shipped in 40,000 Pound Carload Lots Throughout the Country to the Atlantic Seaboard, Flowing in Tiny Streams from Slot Machines on Broadway and Consumed With Avidity in Plain or Salted Form, in Confectionery and on Tables Where Delicacies are Served --Commercialized After Centuries by the Invention of a Cracking Machine by a Woman of Albuquerque Who Toured the Country Spending Several Months in a Machine Shop to Perfect the Application of the Idea---The Transformation of an "Appetite Teaser" to a National Food.

THE Romance of the Pinon Nut has been told by no one, perhaps, better than by Frederic J. Haskin, whose account we reproduce herewith:

The pinon nut, the tasty seed of the pine tree which the southwest Indians have been using for food for centuries, has at last come into its own as a popular delicacy. A periodic bumper crop of the little brown nuts in the mountains of New Mexico this season has resulted in the commercializing in the east of the pinon as an exclusive product of the southwest highlands.

The pinon is a volunteer. Nature does the farming, the Indians do the harvesting and the traders do the marketing. The nuts are produced each fall at an expense to no one, the pine cones dropping their ripe seeds lavishly on the ground. They are gathered by the Indians who bring them to the trading posts for shipping to eastern markets. The gatherer is paid for his labor in harvesting the nuts.

The species of two-leaved scrub pine which produces the edible seed known as the pinon, is found scattered through the four southwestern states of New Mexico, Arizona, Utah and Colorado. It occurs, associated with cedar and juniper trees, in dry, rocky soils at altitudes between five and nine thousand feet. The tree has a shriveled, crooked trunk, a spherical crown and reaches a height of about 16 feet. It grows slowly and sometimes attains an age of over 300 years. Its scientific name is *Pinus edulis*.

It is commonly believed that the pinon bears only once every five years. It is true that exceptionally large crops occur only at intervals of from three to seven years, but there is a crop each year. The nut requires two years to ripen and while last season's crop lies on the ground beneath the pine tree the next crop is maturing in small cones on the tree. The 1921 crop was one of the largest in recent years, about 2,000,000 pounds being gathered in New Mexico alone.

Gathering the Pinon

In October, the big harvest season, bands of Indians flock to the mountains where the pinon trees are to be found. There they camp moving along as they exhaust the crop of each area. The Indians after their own indolent fashion pick up the tiny nuts by hand from the ground. Their white brothers however, spread a big tarpaulin over the ground beneath the tree and shake the limbs until every cone is emptied. The nuts are carried in sacks and baskets to the nearest Indian trading post, where they are sold to the dealer, who ships them to market.

The nuts are shipped in 40,000 pound carload lots to the east where they are purchased by candy makers, clubs and hotels, and by companies which vend the nut in various ways. The man who gathers the pinons is paid from five to ten cents a pound, the wholesale dealers average about 15 cents a pound and the retailers sell the



FANNIE S. SPITZ, Albuquerque, N. M.
Inventor of the F. S. S. Sunshine Pinon
Cracker and Separator

nuts at about 25 cents a pound in the west. The 1921 crop in New Mexico, the only state to market the nuts on a large scale, is valued at about \$200,000.

Strangers to the exotic little brown nut in the east are making its acquaintance through the agency of slot machines which are placed in the subway of New York. A nickel in the slot brings a handful of the pinons. The sudden fad for the nuts sold in this fashion increased the price over 100 per cent last season. Pinons bring about a dollar a pound in slot machine sales.

But the unshelled pinon is difficult to eat. The birds and squirrels who live on them and the Indian who considers them a staple article of winter diet, have time aplenty to crack the thin, brittle shells to

obtain the rich meat inside. Few others, except perhaps practiced "pinon busters" who have the habit, will take the time or risk their teeth in cracking the nuts. The pinon shelled and ready to eat, however, is a great delicacy.

It remained for a woman of vision and infinite patience to solve the problem of preparing the pinon for immediate use. Mrs. Fannie S. Spitz of Albuquerque, N. M., is the inventor of the first machine made for the shelling of the little nuts. Believing that it was possible to shell the pinon in large quantities, Mrs. Spitz experimented until she evolved a machine that would do the work. It was necessary for her to tour the country studying various nut-shelling devices and to spend over three months apprenticeship in a machine shop in order to perfect her invention.

Shelled by Machinery

The novel machine, on which this woman inventor holds the patent, is power driven with a capacity of about 80 pounds of shelled nuts a day. The efficiency and simplicity of the machine are remarkable the cleaned and sorted nuts pouring into a hopper and flowing out in a stream of white whole meats. In the basement factory at her home Mrs. Spitz alone shelled and marketed 10,000 pounds of pinons last year. She markets the nuts in cardboard cartons and glass jars.

The food value of the pinon is 3,142 calories per pound. This is twice the value of an equal weight of dried beans, over four times that of boiled eggs and half again as much more as a pound of peanuts. The shelled nut is composed of 2.59 per cent water, 16.98 per cent protein, 59.83 per cent fat, 16.20 per cent carbohydrates (sugars, starches, etc.) and 2.68 per cent ash.

The use of the nut seems to be unlimited. The pinon adds a delicious and harmonizing flavor to most food. It is often served by fastidious chefs in vegetable soups and in the dressing of baked fowl. In salads it combines with all fruits and vegetables and is used in all sorts of confections and pastry. The pinon praline is one of the most popular nut novelties. As a diet for per-



RESIDENCE OF FANNIE S. SPITZ, Albuquerque, New Mexico
Where Pinon Nuts Were First Shelled by Machinery Through Her Invention

sons afflicted with certain kidney ailments the pinon is said to be excellent.

As an industry the pinon harvesting and marketing is destined to become one of New Mexico's great commercial enterprises. Little known throughout the eastern part of the country until last year, the nut has created a demand for itself that the state has found difficult to supply. Other states in which the pine tree bears edible seeds will soon turn to their forests to supply the sweet tooth of a nut eating nation.

The feature of the pinon nut industry is the invention of the cracking machine. For centuries the nut has been a staple food of the Indians of the Southwest. For years the kernels have been extracted from the hard shell by hand and at the risk of injuring the soundest teeth, the richness of the nut inducing patient work. The average pinon nut in shell is $9/16$ of an inch in length and $1/8$ of an inch in diameter. The shell is hard. Details of the development by Mrs. Spitz of the prior art would make a long story and an interesting one. The rewards were great and instantaneous. The product of her machines were taken eagerly, the demand having exceeded even a capacity of 80 to 100 pounds of shelled nuts a day, from the start. One of the largest users of shelled nuts from Mrs. Spitz's machines at the outset was Fred Harvey of the Harvey chain of restaurants. He is still one of the largest users. The keeping quality of the pinon nut is shown by the fact that up to last month not an ounce of the 1921 crop of nuts had been shelled in the Spitz factory, the 1920 crop supply not having yet been exhausted.

In an article in the March issue of the *Journal*, on the subject of the pinon nut reference was made to disadvantage of cracking the nut by hand and hope was expressed that this would be overcome. The writer evidently had heard only recently of Mrs. Spitz's invention. Her cracking machine overcame the disadvantage referred to, as long ago as 1917; since then tons of machine-shelled pinon nuts have found their way all over the country, and even abroad.

Oregon Walnuts

Until recently the Oregon walnut industry has been in an experimental stage. Growers have been engaged in learning the best methods for growing and handling the crop, and the market for the nuts has received little consideration because of the ready local demand. A turning point has been reached with the production of this year's bumper crop.

An estimated 600,000 pounds of walnuts in this season's yield makes it necessary to begin to consider broader fields than the local market, even though the northwest will readily absorb more nuts than have yet been produced in the state. It has become advisable to adopt policies upon which the foundations of a rapidly growing industry can be laid.

Looking forward to the time in the not far distant future when it will be necessary to seek broader markets, walnut growers have this year adopted four standard grades under which more than half of the walnuts of the state will be marketed this fall.

Each year will see many young orchards coming into bearing, and the production will as a consequence go up at a rapid rate for a number of years. Additional plantings are being made constantly. Dundee is one of the producing centers of the state, and the districts around Salem, Silverton, Amity, Sheridan, Yamhill, Forest Grove, Newberg, Wilsonville and Eugene carry their share of the acreage. Production on a commercial basis in the northwest is confined largely to the Willamette valley and Clarke county, Washington.

Though the industry is in its infancy, it represents an investment of nearly three and a quarter millions of dollars, and but a small portion of the land suited to the production of nuts is in use.

Just mention AMERICAN NUT JOURNAL.

NUT INDUSTRY FOR SALE

THE F. S. S. PINON NUT SHELLER and SEPARATOR
PATENTS, BUSINESS and GOOD WILL



Reg. U. S. Pat. Off.

THE F. S. S. NUT SHELLER AND SEPARATOR
PRODUCE 80 TO 100 POUNDS OF SHELLED PINON NUTS IN
EIGHT HOURS, DISPLACING THE TEDIOUS HAND WORK OF
YEARS.

The original factory of the inventor, Fannie S. Spitz, at Albuquerque, New Mexico, has long been taxed far beyond its capacity, and the health and strength of the inventor does not warrant her expansion of the business. Quantity orders for thousands of pounds annually have to be turned down.

Extraordinary interest in the machines is manifested not only by American dealers but also by foreign manufacturers. The mountain sides of New Mexico Arizona and Colorado are covered with forests of pine trees producing millions of pounds of edible nuts. During last fall and winter hundreds of tons of Pinon Nuts were shipped to points all over the country from this territory. The nuts are highly prized and in strong demand by confectioners and others who have long desired them in greater quantities than hand-shelling made practicable.

USE OF THE NUT REVOLUTIONIZED

The use of the nut will be revolutionized by Mrs. Spitz' invention. Shelled Pinon Nuts keep indefinitely in proper containers. The nut has a high food value; 3,142 calories per pound. It is the "appetite teaser" no longer; it is a highly concentrated food for use the year round.

AN OPPORTUNITY FOR A MAMMOTH FACTORY—MECHANICAL AND PROCESS PATENTS AND GOOD WILL ARE ON THE MARKET. THE LOGICAL LOCATION FOR SUCH A FACTORY WOULD BE IN THE HEART OF THE PRODUCING SECTION OF THE COUNTRY—SOUTHWEST. BRANCHES COULD BE ESTABLISHED AND MACHINES COULD BE OPERATED AT MANY POINTS.

It is probable that the Pinon Nut will be produced under cultivation in many States in the Union, now that the nut can be shelled by machinery. Nut

experts say that the pinon tree can be grown over a wide area.

My Machines and Methods are
fully protected by United States
and foreign patents.

FANNIE S. SPITZ

Inventor and Sole Proprietor
of the F. S. S. Sunshine
Nut-Shelling and Sepa-
rating Machines.

323 North Tenth Street
ALBUQUERQUE, N. M.



Copyright 1921 by Fannie S. Spitz

American Nut Journal

COVERING NUT CULTURE

NORTH—SOUTH—EAST—WEST

AMERICAN FRUITS PUBLISHING CO., INC.
50 State Street - Rochester, N. Y.

RALPH T. OLCOTT, Editor and Manager
Official Journal Northern Nut Growers' Assn
Official Journal National Nut Growers' Assn

SUBSCRIPTION RATES

One Year, in advance.....\$2.00
Canada and Abroad..... 2.50
Single Copy20

ADVERTISING RATE

Per column inch.....\$2.80
Forms Close 10th of each month

ROCHESTER N. Y., APR., 1922

NUT ASSOCIATIONS

California Almond Growers' Exchange—President, G. W. Pierce; manager, T. C. Tucker, 311 California St., San Francisco.

California Walnut Growers' Association—President, C. C. Teague; secretary, W. T. Webber; manager, C. Thorpe, 1326 East Seventh St., Los Angeles, Cal.

Georgia-Florida Pecan Growers Association—President, J. M. Patterson, Putney, Ga.; vice-pres., A. C. Snedeker, Blackshear, Ga.; sec'y-treas., J. S. Wight, Cairo, Ga. 1922 meeting, Thomasville, Ga.

National Nut Growers Association—Pres., Charles A. Simpson, Monticello, Fla.; vice-pres., J. M. Patterson, Putney, Ga. and E. C. Butterfield, Winona, Tex.; secy., J. Lloyd Abbot, Spring Hill, Ala.; treas., J. Slater Wight, Cairo, Ga. 1922 meeting, Thomasville, Ga., Oct. 4-6, 1922.

National Pecan Growers' Exchange—President and manager, William P. Bullard, Albany, Ga.; vice-pres., J. B. Wight; secy-treas., A. D. Galt.

Northern Nut Growers' Association—President, James S. McGlennon, Rochester, N. Y.; vice-pres., J. F. Jones, Lancaster, Pa.; treas., Willard G. Bixby, 32 Grand Ave., Baldwin, N. Y.; secy., Dr. W. C. Deming, Georgetown, Conn. 1922 meeting, Rochester, N. Y., Sept. 7-8.

Texas Pecan Growers' Association—President, J. H. White, Mason; vice-pres., William Capps, Fort Worth; secy., J. H. Burkett, Austin, Tex.; exec. com., J. H. Burkett, Austin; Prof. Will H. Mays, Austin; Prof. A. Caswell Ellis, Austin.

Western Nut Growers' Association—President, Ferd Groner, Hillsboro, Ore.; secy-treas., C. E. Schuster, Corvallis, Ore.

Pupils Receive Prizes

In 1921 on Arbor Day the pupils of the Clarion, Pa., schools planted numerous young walnut trees that were raised by M. M. Kaufman in his Nursery on Liberty St., Clarion. The seed from which these trees were grown was taken from the large walnut tree standing in front of the Community House. To encourage proper care of these trees Mr. Kaufman offered five prizes to be given each year for three years to those pupils whose trees showed the best care. District Forester C. E. Zerby inspected these trees, locating them by means of a sketch submitted to him by the pupils. As a result of this inspection prizes were awarded last month to pupils in amounts of \$5, \$4, \$3, \$2 and \$1.

Once in a while a woman hits the nail on the head, but about nine times out of ten she hits the nail on her finger. That's why the California Walnut Growers Association arranged to have housewives crack walnuts with a can opener. All that is required is a simple twist of the wrist. The association has one machine to crack walnuts and another to seal them into airtight glass jars and tins. Mrs. Consumer has them at her disposal in a jiffy by cutting out the soft tin lid.—Los Angeles Express.

J. A. Kennedy, Pauls Valley, Okla., recently addressed the Carter County Pecan Growers Assn., in Ardmore, Okla.

PECAN TARIFF MEASURE

On March 31st President C. A. Simpson of the National Nut Growers' Association sent this announcement to Association members and others directly interested:

I have just been advised that the Senate committee on Tariff schedule have decided on the old Tariff rate of 1c on unshelled Mexican pecans and 2c on shelled.

It does not seem that this Tariff is at all fair to the pecan industry in comparison with Tariff on almonds and walnuts. I understand the new Tariff calls for a rate of 4c on unshelled almonds and 12c on shelled, also the present bill calls for 2½c on unshelled walnuts and 7½c on shelled.

Will you please wire your Senator immediately on receipt of this letter urging at least the same rate as on almonds. Unless you wire your Senator immediately we will not be able to do anything this year as the Tariff committee in the Senate has already agreed on the 1c and 2c rate and hence you see nothing but quick action on your part will help this year. Unfortunately I do not know the number of this Tariff Bill, but as I understand it is part of the general Tariff Bill.

This Journal immediately wired U. S. Senators and we presume other messages were sent. As we go to press the matter is pending.

On April 11th the revised tariff bill was reported to the U. S. Senate by Senator McCumber of the finance committee. It is expected that there will be discussion during two months in Congress and republican leaders express the hope that the measure can be sent to the President for his signature by August 10th. It will take the place of the emergency tariff act and will become operative when signed by the President. The bill provides:

Almonds, unshelled, 5 cents pound; Fordney, 4; Payne-Aldrich, 4; Underwood, 3. Shelled, 15 cents; Fordney, 12; Payne-Aldrich, 6; Underwood, 4.

Brazil nuts, 1 cent pound; Fordney, same; Payne-Aldrich, 3; Underwood, 1.

Coconuts, ½ cent each; Fordney, same; Payne-Aldrich and Underwood, free. Prepared coconut meat, 4 cents pound; Fordney, 4½; Payne-Aldrich and Underwood, 2.

Peanuts, unshelled, ¾ cent pound; shelled, 1½ cents pound; Fordney, 3 and 4; Payne-Aldrich, ½ and 1; Underwood, ¾ and ¾.

Walnuts, unshelled, four cents pound; shelled, 12 cents; Fordney, 2½ and 7½; Payne-Aldrich, 3 and 6; Underwood, 2 and 4.

Pecans, unshelled, 1 cent; shelled, 2 cents pound; Fordney, same; Payne-Aldrich and Underwood, 1 cent.

National Association Committees

President C. A. Simpson has appointed the following committees for the National Nut Growers' Association for the current fiscal year:

Marketing—J. B. Wight, chairman; Elam G. Hess, J. Lloyd Abbot, E. C. Butterfield.

Varieties and Varietal Application—H. K. Miller, chairman; B. W. Stone, E. J. Kyle, W. A. Warren, J. H. Burkett.

Federal and State Aid—J. M. Patterson, chairman; R. C. Berckmans, J. B. Wight, R. J. Bacon, A. C. Ellis, H. H. Simmons, J. Lloyd Abbot.

Grades and Standards—Theodore Bechtel, chairman; C. A. Van Duzee, J. S. Wight, E. C. Butterfield, R. V. Small.

A London exchange says: If nuts disagree, even with the most delicate, it is because they are partaken of at the wrong time. When consumed between meals they are almost certain to disagree, as they will also if eaten after a heavy meal of other food or insufficiently masticated. The proper time to eat nuts is just at the beginning of meals. Then they fill the mouth with a copious flow of saliva which will assist in emulsifying the fats stored in this important food.

OREGON QUARANTINES FILBERT

Governor Ben W. Olcott, of Oregon, has proclaimed:

A fungous disease known as the Eastern filbert blight (*Crytosporella anomala* (PK.) Sacc.) is established in the eastern and central portions of the United States, where it occurs naturally on the American wild hazel (*Corylus Americana*), and where it is doing great damage to the cultivated filbert. In the most westerly states of the United States the growing of the imported filberts is becoming an important industry which promises to be of immense value. For the protection of the filbert growing industry it appears necessary to prohibit the importation of the cultivated filbert and the American wild hazel from any locality not known to be free from the disease or its native host. The following quarantine was therefore established:

Now, therefore, I, Charles A. Park, president of the Oregon State Board of Horticulture, under the authority conferred by Section 1 of Chapter 246 of the General Laws of 1913, and Section 4 of Chapter 342 of the General Laws of 1915, do hereby prohibit the importation into the state of Oregon all trees, plants, grafts, cuttings or scions of the cultivated filbert or hazel and the American wild hazel (*Corylus Americana*) from all portions of the United States lying east of the states of Idaho, Utah and Arizona, and that portion of the Dominion of Canada which lies east of the province of Alberta.

Done at Salem, Oregon, this 21st day of January, 1922.

The statement in the governor's proclamation that the blight is doing great damage to the cultivated filbert in the eastern and central portions of the country was referred to President James S. McGlennon of the Northern Nut Growers' Association. Mr. McGlennon is associated with Conrad Vollertsen in the conduct of the only Nursery in the eastern and central states propagating cultivated varieties of the filbert exclusively. Thousands of named varieties of filbert plants have been distributed from this Nursery all over the eastern and central states.

"There has not been the least blight in our Nursery at Rochester, N. Y., since it was established eight years ago," said Mr. McGlennon. "Even if there had been, we are confident that it could easily be controlled by the cutting out of the blight from a limb or twig, as recommended by Dr. Robert T. Morris, and spraying with Bordeaux mixture. And not a single instance of blight has been reported by growers of filbert plants obtained from our Nursery. On the contrary from all points come reports that the plants are growing thriftily."

Comment on Seeking New Varieties

In the opinion of R. A. Harris, Riverside, Cal., who has had long and varied experience in propagating trees, and who has made extensive study of hybridizing, the greatest progress in nut culture will result from improving present varieties rather than in attempting violent crosses. He says: "Try to purify the strains we now have and keep out the undesirable qualities that may be introduced by crosses. When a cross is made there is no blend of characters; rather, one parent or a near relative hands over a unit character unchanged. It is not possible to tell in advance what this unit will be. I would plant nuts of our best varieties from self-pollinated trees or trees pollinated from trees of same variety and select the seedlings that promise best. If a desired quality was not in the strain it would have to be introduced; and that is just where greatest care should be used to avoid introducing an undesirable character at the same time."

Incorporated: Walnut Growers' Warehouse Company, Los Angeles—To conduct a warehousing business; capital stock \$10,000; shares, 100 at \$100 each; subscribed, \$500.

60 Cents a Bushel vs. \$36

Recently a subscriber to the American Nut Journal asked for comparison of the returns from a pecan grove and a field of vegetables or other crops. While we were gathering this information there came to our desk a copy of the Montgomery, Ala., Journal, of Oct. 23rd., in which we find the inquiry answered as to one crop at least:

In the course of his peregrinations through Montgomery county in search of the oldest pecan trees, Miles M. Dawson, local pecan and peach expert found another ancient tree during the past week. This pecan is on the property of A. M. Baldwin, president of the First National Bank, at 21 Gilmer avenue. It is six feet in circumference and has a spread of 78 feet. This year it will give a crop of about eight bushels of nuts. They are small but merchantable. The tree must have been planted as a seedling and Mr. Dawson figures its age at 100 years.

Comparing the difference between the revenue from pecan trees and other crops, Mr. Dawson cited his own experience with a Stuart tree giving eighty bushels this year and an acre of sweet potatoes. He is getting 60 cents a pound for the pecans, or \$36.00 a bushel, against 60 cents a bushel for sweet potatoes. For approximately 480 pounds of nuts from one tree he will obtain \$288.00. At the same time, Mr. Dawson does not advise sweet potato growers to enter the pecan business and abandon sweet potatoes. Both crops are needed and both are profitable in their way. What he does advise is that every farmer and every city resident who has the ground should plant a sufficient number of pecan trees to realize some of the big profits made from this crop annually.

Readers can compare a crop which sells for 60c per pound with anything they are selling by the bushel and judge accordingly.

Shell-Covered Delicacies

Over in that section of the West Side, where cafe signs are in Spanish; over on the East Side, where it's a poor clerk who can not make his selling talk in at least three languages, as well as midtown, in those Levantine shops that style themselves "high oriental," windows are filled with nut meats, while on the counters stand trays of every possible confection that can be made from nuts, says a despatch from New York city.

Walnuts from California and paper shell pecans from Georgia and Texas compete for public favor with almonds from Spain, pignolias from Italy and pistachios from Syria.

Nibbling nuts is gaining in favor as a popular pastime, say dealers who sell the shelled meats in packages built to fit the pocket. So much confidence have they in the quality of the goods they sell that few of them are willing to make any but the most conservative statements about the food value and the fine flavor of high quality nuts.

"I figure it is this way," says a dealer who does not wish to have his name given as the author of a somewhat quixotic statement, "that the very best friends of the nut have been its worst enemies. It is not a substitute for other foods, but an auxiliary food, easy to carry and easy to keep."

Increased facilities for shipping from the Mediterranean countries, as well as the steady advance made in nut culture in California and the Gulf states, have made this year's supply a most plentiful one. The single exception to this, says an upper Fifth avenue dealer, is in the supply of paradise nuts. Those nuts, with their thin, smooth, wrinkled shells, have a meat that many people consider the finest in the world. They come to our markets from South America, together with the Brazil nut, and may be said to resemble it in flavor in about the way that the taste of cauliflower resembles the taste of cabbage.

The U. S. Dept. of Agr. announces introduction of a tropical black walnut from Porto Rico that may have possibilities for timber production.

THE NORTHERN NUT GROWERS' ASSOCIATION

THIS Association comprises among its members those most skilled in the propagation of nut trees and those most advanced in nut growing. It also comprises among its members many who are not experts, and who become members for the purpose of learning. It welcomes to membership both the expert and the learner. It is not organized for profit, its aim being the acquisition and dissemination of knowledge of nut trees and nut growing. A number of its members have expended much time and considerable money in experimental work, and have given the results to the Association. This work is still going on.

The proper use of nuts is not generally understood. They are usually used as a delicacy, whereas they are a most concentrated food. Careful experiments have shown that they will successfully replace meat in the diet even of such animals as wolves and tigers. The food value of nuts from an acre of ground is many times that of the beef that can be produced on the same ground, and nut growing seems destined to solve the problem of the diminishing supply of meat and the increasing demand for it. Probably the most practical use of nuts is to partially replace meat rather than to replace it altogether.

In Europe, land with bearing nut trees on it brings a higher rental than the best cultivated land, and the same will be true in America when the value of nut tree crops is more generally recognized. In certain sections of the South, pecan trees bearing fine nuts have enormously enhanced the value of the land on which they stand, and it is only a question of a few years when this will be true in other sections of the country. It will be so when the orchards of nut trees, now being planted, begin to bear. It is confidently believed by the Association that nothing can be grown which will give as great returns, for the labor expended on them, as bearing nut trees.

Nut trees will not come true from seed any more than fruit trees will. A fine nut, when planted, will almost certainly cause a tree to grow which will bear very inferior nuts, but this same tree will bear fine nuts if it is grafted or budded with scions or buds from a tree bearing fine nuts. While fruit trees have been successfully grafted and budded for many years, it is only within a few years that it was possible to do this with nut trees. This can now be done quite successfully, however, and the methods of doing it are being steadily improved. Young trees, grafted or budded to the fine varieties of nuts that have been discovered can now be procured from a few nurserymen making a specialty of growing them. The Association has a list of such nurserymen which will be mailed free on request.

While fine varieties of northern pecans, hickories, black walnuts, etc., have been discovered and are being propagated, it is doubtless true that all the fine nut trees in the country have not come to the attention of the Association and hence it is seeking each fall to learn of other meritorious nuts, and, to further this, prizes have been offered for northern pecans, hickories, black walnuts, butternuts, hazels, English walnuts and Japan walnuts.

It is perhaps well to state here that nut growing, being the newest branch of agriculture, at least in America, is one about which everything is not known, and the best varieties of each particular kind of nut for each section is something that has not been definitely worked out. It is being done, however, and progress in growing nut bearing trees and shrubs is so rapid that a person whose knowledge is two or three years back is behind the times. This is in marked contrast with other branches of agriculture where good cultural methods and varieties were worked out years ago. In the matter of nut growing almost the only way to get the latest information is by reading the American Nut Journal and through the Secretary's office. There is no place where up-to-date information on nut growing is to be found as it is in the Secretary's office, and his services are free to members.

Even though the facts require it to be stated that our detailed knowledge of nut growing is not as comprehensive as that on most other agricultural subjects, yet it must not be understood that it is not sufficient so that planting nut trees must be regarded as so difficult that few can succeed. Anyone, who plants the right kind of nut trees, in good soil, and gives them proper attention till they become established will have something that will not only be a source of pleasure but a source of constantly increasing income. The English walnut, hazel and almond orchards of Europe and California and the pecan orchards of Southern United States have amply demonstrated this for these sections, and the nut trees planted in the north which are just coming into bearing have convinced careful observers that the fine nut trees in the north will do likewise. Therefore the Association wishes to emphasize that the important thing to do now is to PLANT THE FINE VARIETIES OF NUT TREES THAT WE NOW HAVE.

Membership in the Northern Nut Growers' Association is as noted below:
 Membership for one year, including copy of Current Report.....\$2.00
 Membership for one year, including copy of the Current Report and subscription to the American Nut Journal for one year, if sent to an address in the United States 3.25
 Membership for one year, including copy of the Current Report and subscription to the American Nut Journal for one year, if sent to an address in Canada or abroad 3.75
 The Current Report is the 10th. Copies of the 2d, 3d, 4th, 5th, 6th, 7th and 8th can be supplied at 50c each to members, or \$1.00 each to non-members. The 9th report has not yet been issued.

The American Nut Journal is the only paper devoted exclusively to nuts and nut growing. Subscription to it, without membership in the Association, is \$2.00 per year or \$2.50 if sent to Canada or abroad.

WILLARD G. BIXBY, Treasurer, 32 Grand Ave., Baldwin, Nassau Co., N. Y.

Pecan Fertilization

The Texas A. and M. College gives this advice: "The best all-round fertilizer for pecan trees that are planted on shallow uplands oil or sandy loam is to use fifteen or twenty wagon loads of barnyard manure to the acre. If you can not get this, then I would suggest using about two pounds each of cotton seed meal and acid phosphate to the tree. If the trees are between two and five years old the fertilizer should be scattered in a circle around the tree, not coming closer than ten or twelve inches to the trunk that should extend out four or five feet. If the trees are older you should not come closer than two or three feet of the trunk, and the circle should be widened according to the age of the tree."

An Ecological Question—A pecan tree whose annual rings show it to be 125 to 150 years old was cut down last month from the south bank of Red River, in territory which is claimed as part of Oklahoma in a pending court action, says The News of Electra, Tex. The tree, which was cut down by L. L. Janes, government ecologist, was three feet in diameter and gave ample evidence of an age of a century and a quarter or more. It was cut down at a point about a third of a mile north of the bluff and two miles east of the Grandfield bridge, being just north of land owned by Mrs. Lillis Morgan. The point in question is what Oklahoma claims was the actual bed of the river in 1819.

The American Nut Trade: Market and Crop Reports

THE PECAN

Pecan Crop Statistics

The following statistics, compiled by R. E. Yantis, statistician, Department of Agriculture of Texas, have been gathered by correspondence with the various Commissioners of Agriculture of the States mentioned, and by information given by the railroads of Texas, upon request from this department:

Alabama—From Market Journal and Crop Reporter: 1919, 3,000 acres, 1,000,000 pounds, value \$250,000; 1920, 3,000 acres, 900,000 pounds, value \$315,000; 1921, 4,000 acres, 2,000,000 pounds, value \$600,000.

Arkansas—From Commissioner of Agriculture: Crop estimate for the year 1921 is 110,000 pounds. The White River section in a good year will produce 300,000 pounds. Price ran from 6c to 25c, figures most quoted were from 10c to 14c. Some improved varieties brought 35c. Sixty per cent of the crop gathered was shipped out. The grafted pecan is increasing in numbers.

Florida—From biennial report of Department of Agriculture: 1920, number of bearing trees 65,165; number of nonbearing trees 201,802; value \$367,256; production 42,079 bushels, value \$414,714.

Georgia—From Commissioner of Agriculture: 1920, 900,000 pounds, sold at 45c; 1921, 2,600,000 pounds, sold at 42c. No statistics on seedlings.

Illinois—From Commissioner of Agriculture: Pecans are not grown commercially but large quantities grow on river bottoms in southern part of State. No statistics on production.

Kentucky—From Commissioner of Agriculture: No figures on the output of pecan crop. Federal figures give 50 per cent of full crop, 26 per cent sold to outside markets. Output largely seedlings.

Louisiana—From Commissioner of Agriculture: 1919, number of bearing trees 94,513, number of pounds yielded 2,242,859; 1920 and 1921 production not yet compiled.

Maryland—From Department of Agriculture: The pecan is not grown to any extent in this state. Several years ago an attempt was made to develop pecan growing on a commercial basis, but with very slight results.

Mississippi—From Commissioner of Agriculture: The pecan industry is so young in this state that no reliable statistics are available. This department does not collect or publish agricultural statistics, but depends upon Federal Government reports for such information.

Oklahoma—From Commissioner of Agriculture: 1909 production 894,172 pounds, 1919 production 4,296,642 pounds, 1920 production 644,496 pounds, 1921 production 2,019,422 pounds. Growers received 22c a pound for improved and 12c for seedlings. It is estimated that 45 per cent of the 1921 crop was shipped to outside markets. The per cent of improved nuts in this state is very small, but farmers are beginning to realize the value of the pecan.

Texas—The various railroads of the state have been very willing to co-operate with this department in furnishing information of shipments over their respective lines. The following is a summary of reports made by the companies: The total number of cars so far reported is 274 in carload lots and about two cars in L. C. L. shipments. Ten or twelve cars from Mexico were shipped into this state and forwarded to St. Louis and New York.

From Statistical Abstract of the U. S. 1920 Bureau of Foreign and Domestic Commerce, it is shown that the production of pecans in 1899 was 3,206,850 pounds; 1909 was 9,890,769 pounds.

The value of the 1909 crop was \$971,596, equaling 9.8c per pound.

Twenty-five pecan trees were given by A. J. Knapp, Evansville, Ind., for planting on Evansville College grounds.

GEORGIA

H. M. Dudley, Lexington, Ga., plans to plant 100 acres to pecans.

Col. E. A. Dobbs has bought a half interest in the Nursery of Dr. T. A. Lifsey, Barnesville, Ga., R. C. Melton, Moultrie, Ga., will have charge of pecan grafting.

R. A. Stafford, Barnesville, Ga., has been cracking 5000 pounds of pecans with hand crackers (in the hands of helpers) in a corner of his warehouse, and recently shipped 500 pounds of kernels.

Women Grow Pecans

N. L. Willet says in Augusta, Ga., Chronicle: My pecan census of the Port Royal Railroad is showing me not only the amazing value to every farm as an economic matter of the pecan but its peculiar relationship to the farmer's wife. The wife looks after the pecans and puts the money in her pocket. I have told about Mrs. Lake with her four to five hundred dollars; Mrs. Walker with her two hundred dollars; Mrs. Fowk with her one hundred and forty dollars from ten trees; and a young bride on the Whipple home in Beaufort who will now get from forty to fifty dollars yearly from one single Stuart pecan. There are many other women who are caring for pecans along the road, of course, whom I do not know, and what the Port Royal women do other women can do.

TEXAS

Dr. M. E. Daniel, Honey Grove, Tex., during the last few years has planted hundreds of pecan trees on his large farm and has budded them to named varieties. He has been mayor of Honey Grove eight years.

The San Saba, Texas, Chamber of Commerce has made arrangements to enter a comprehensive exhibit of pecans and native marble in the All-War Texas Exhibit, Southwestern Exposition. The chamber there will co-operate with the West Texas Chamber of Commerce in the matter. The exhibit will be gathered by J. E. Bell, secretary of the San Saba Chamber of Commerce.

In Washington there is to be an International avenue of memorial trees. At the head of the avenue will stand two elm trees. It is perhaps fitting that the elm should be the American tree. It stands high in the "Hall of Fame of Trees" in the American Forestry Association. I may be digressing, but if we are to have a national tree, why not a State tree? May I suggest the pecan as the State tree for Texas? It is native, long lived and fruitful.—W. P. Maloney.

Many Pecan Trees Planted

Georgetown, Texas, April 6—There has been a great impetus in pecan tree planting in this county recently, by farmers and town people. Local Nurserymen report unusual numbers of sales of young pecan trees, and similar reports come from other sections.

50,000 Pecans For Nursery Stock

San Saba, Tex., March 30—Guy Risien, son of E. E. Risien, has planted this season for Nursery stock, 50,000 pecans. There is great interest in pecan planting throughout the country. No less than 200 acres have been set to new budded varieties in different sections of San Saba County. These it is estimated will be paying largely in production within the next five years. Interest in pecan culture is constantly on the increase in this county.

Census Report on Texas Pecans

The report of the bureau of the census of the United States fourteenth census, 1920 for Texas, gives the number of farms reporting of pecan trees not of bearing age as 9,590 as against 6,174 in 1920. The number of trees was reported as 449,464 as against 621,550 in 1910.

The number of farms reporting trees of bearing age in 1920 was 19,204 as against 10,519 in 1919. The number of trees reported for the same years was 1,045,694 and in 1910 1,087,619. The number of pounds of pecans yielded in 1919 was 16,755,421 valued at \$3,686,191 as against \$5,832,367 valued at \$556,203 in 1909.

ALABAMA

J. C. Wilkerson heads a project for the development of 500 acres in the Marion, Ala., district, in five-acre pecan orchards.

Incorporated: Alabama Pecan Grove, Marion, Ala., \$25,000; W. O. Shivers, N. B. Mason, D. K. Mason.

President William P. Bullard, National Pecan Growers Exchange, recently addressed the Central Alabama Pecan Growers' Assn., at a Selma, Ala., meeting at which the president, C. Kirkpatrick, presided and T. H. Miller was secretary.

SOUTH CAROLINA

Has 2000 Pecan Trees

George W. Wilkins, Jr., of McDonald-Wilkins & Company, Frogmore, South Carolina, writes that Josef Junker has a pecan grove of 2,000 trees, old and young. This estate formerly belonged to Senator Simon Cameron who got it from the government, as a big game preserve.

Has 6000 Pecan Trees

Frederick Winthrop, Allendale Co., S. C., says: "I have about six thousand pecan trees. They are some thirteen years old, but have not until now had the care they should have had. I have had some 1200 cut back and budded or grafted, as these did not bear at all. In another year I expect to be independent of cotton."

300 Pounds From Two Trees

Mrs. John L. Folk, Fairfax, S. C., writes: "We gathered about three hundred pounds of nuts from two trees in our yard, the Columbian and Stuart. I sold something over one hundred dollars worth at 50 and 60 cents per pound and had all we wanted for personal family use, and number of Thanksgiving and Christmas packages for friends."

A NEW BOOK! NUT GROWING

By Robert T. Morris

The latest and only up to date book on the newest and one of the most important branches of Horticulture, giving a broad survey of a rapidly growing industry. Detailed explanation of successful methods of propagation and the new process of grafting with the use of paraffin; illustrated.

An invaluable work for all nut growers.

Price. \$2.65, Postpaid

AMERICAN FRUITS PUB'G. COMPANY
39 State Street, Rochester, N. Y.

Just mention AMERICAN NUT JOURNAL.

PECAN CULTURE IN CALIFORNIA

R. A. Harris, Riverside, Cal., takes exception to a recent statement by E. E. Risien, San Saba, Texas, that the climate conditions of California will never admit shipment of pecans from that state to Texas; any more than will the climate of Texas produce almonds or walnuts for shipment to California. Mr. Harris, who is proprietor of the Western Pecan Nursery Company, says:

"I know positively that we can produce in California as good pecans as are produced elsewhere. I have already proved that we can. California has no serious rival in the United States in English walnuts, almonds, apricots, figs, olives, lemons or Navel oranges. Not one of those is native to the state, and every one of those has been declared sure to fail if planted in quantity! Yet California's output of fruits and nuts last year brought to the state nearly two hundred and seventy-one million dollars—the result of planting in quantity fruits and nuts which were not native!

"Climate is a governing factor but climate alone will avail nothing. California is 1000 miles north and south and from 300 feet below sea level to almost fifteen thousand feet above. One can look from the lowest place in the United States (Death Valley) to the highest place in the United States proper (Mt. Whitney), about one hundred miles apart. From oranges to perpetual snow often is only a few miles. Death Valley is the driest place in the U. S.; Humboldt county is about the wettest.

"We have only started with pecans, but we shall arrive with them just as surely as we have with other nuts and with fruits, and by the same methods. The Stuart pecan, while valuable in most localities, I am sure will never have prominent place in our varieties. This past year, 1921, I fruited on my place here in Riverside, Burkett and Texas Prolific; both fine western pecans. The Texas Prolific is one of Mr. Risien's introduction, and is as fine here as those I sampled at Mr. Risien's place at San Saba, from his original stock; and is a better cracker. The Burkett pecan I consider one of the finest well-known Texas varieties for quality. In this respect it has no superior any where. Altogether it is a very valuable nut. Those I produced here are in every way except size, equal to the Burkett nuts I sampled at Mr. Burkett's place, and are as large as those produced by Mr. Burkett on his young trees.

"As to Texas producing almonds and English walnuts, there is no good reason why she should not do this in large quantities. One of our prominent varieties of almonds, the Texas Prolific, originated near Dallas, Tex.

"That strip of country from Corpus Christi to Galveston and extending inland 60 to 75 miles from the Gulf of Mexico, should and would, if known selected varieties of English walnuts were planted and intelligently cared for, produce as abundantly as California, near the coast.

"The possibilities of Texas are as great as those of California or any other state. I have great faith in its future. It should be shipping 55,000 carloads of the finest nuts every year. These would be worth many times what California's citrus fruits are worth and a real honest-to-goodness human food! Nut Culture has only reached its baby stage. It's a bold man that predicts its limitations."

\$6,000,000 in Three Years

Final statements and checks recently sent out by the California Almond Growers' Exchange, show that 4000 grower-members have received a total of approximately \$6,000,000 for their 1919, 1920 and 1921 almond crops.

General Manager T. C. Tucker, California Almond Growers' Exchange conducted in person the campaign for the signing of five-year contracts by almond growers, making his headquarters in Sacramento.

D. Gellatly, Gellatly, B. C., last month presented to E. D. Barrow, minister of agriculture, Victoria, B. C., a quantity of Japanese walnuts grown in the Okanagan district.

Just mention AMERICAN NUT JOURNAL.

EXPERT PECAN INFORMATION

For a limited period the membership dues in the National Nut Growers' Association have been reduced from \$4 to \$2; or a membership in connection with one year's subscription to the American Nut Journal for \$3.25.

Those paying their dues have the privilege of the floor at the annual meetings and will also receive a free copy of the printed proceedings of the annual meeting. These proceedings include all the papers read at the convention, as well as a stenographic report of the discussions of the papers.

If you want to learn the secret of how to produce the most nuts from your pecan trees, then read the last proceedings of the Mobile convention, as Dr. J. J. Skinner in his paper "The soil fertility and fertilizer problems in pecan culture," divulges secrets that are worth thousands of dollars to you. Other important papers appearing in the Mobile Proceedings are:

- Future of pecans.
- Nut culture on the Gulf coast.
- Pecan culture in Alabama.
- The Southern farm journal's interest in pecan culture.
- Build a pecan orchard.
- Budding and grafting.
- Varietal discussions in pollinization.
- Requisites of successful pecan growing.
- Pecan insects.
- Pecan scab.
- Has rosette been conquered?
- Papers on all the above subjects are by men of high standing in the pecan industry and those who know their subject thoroughly by experience.

Send your subscription today to the Secretary, J. Lloyd Abbot, Route No. 1, Spring Hill, Ala.

THE ALMOND

New Almond Exchange Features

The California Almond Growers' Exchange, which has been one of the strong California co-operatives for years under the seasonal contract plan, is out of debt after three lean years, but it has started a campaign among its members for the five year crop agency contract as a protection against the storms of the future.

Not only have the almond growers adopted the longer contract, but they have taken another organization step to consolidate their position by throwing open membership in the State Exchange to individual growers. Heretofore, growers were members of local associations which were allied in the state organization known as the California Almond Growers' Exchange. Under the new order associations may remain as members, but individuals also will have the privilege of selling their crops directly through the parent exchange.

This form of organization is expected to cure many organization ills. Taken with the five-year pooling contract, the exchange, it is stated, will be able to lay down marketing plans, advertising campaigns and manufacturing plans for periods of five years.

The oldest almond growers association in California, the Davis Association, which was twenty-five years old last month, voted unanimously to sign the new five-year crop agency contract offered to growers of the state by the California Almond Growers' exchange in order to save the exchange from liquidation.

PERSIAN WALNUT

Short Supply of Walnut Trees

Mr. McClure of the Nursery firm, Groner & McClure, reports that he will have only 15,000 black walnuts to graft to the famous Vrooman Franquette this year, whereas he had 26,000 last year and a stand of 85 per cent successful grafts. Dr. Walgamot, proprietor of the Franquette Nursery, at Canby, also has few black walnut stocks to graft upon, as compared with last year.

The last season was a profitable one for the walnut Nurserymen, largely on account of the splendid percentage of successful grafts and the satisfactory prices received. It is estimated that nearly two thousand acres were planted to English walnuts in the Pacific Northwest, and that more acres would have been planted had the trees been available. The coming season gives promise of an acutely restricted acreage and a slightly higher price to the grower of first class trees, though even the smaller trees will not be passed up.

Remarkable Seedling Walnut

It has been thought by many that in the course of time a seedling walnut would be found growing in one of the hundreds of seedling orchards in the Northwest that would have all the advantages of the Vrooman Franquette and none of its disadvantages; but it remained for a city lot in Portland, Ore., to bring forth a seedling walnut tree which bore when sixteen years old 200 pounds of fine nuts which excel in quality the time-honored Franquette nuts. It is thought that if this tree had the advantages of orchard cultivation its yield would have been markedly greater. Henneman Prolific was the name for the variety suggested by A. A. Quarnberg, in honor of H. A. Henneman, former president of the Western Nut Growers Association and discoverer of the tree; but this was changed to Henneman by vote put to the members of the Western Nut Growers' Association, so that it might conform to the ruling of the American Pomological Society that only one word constitute a varietal name. The tree is being carefully watched for further remarkable performance, and in the meantime is being propagated by Richard H. Turk, Washougal, Wash., who is probably one of the youngest full-fledged Nurserymen on the Pacific Coast.

Ask Manchurian Walnut Inquiry

The Oregon Growers Co-operative Association has requested, through Senator Charles L. McNary, the investigation of the Manchurian walnut industry by the United States department of agriculture. Although the quality of the Manchurian nut is far inferior to our own product, yet by bleaching the nuts can be made to appear like and compare very favorably with the Oregon nut.

Big Walnut Crop Predicted

The largest crop of California walnuts in the history of the industry is anticipated by officials of the California Walnut Growers' Association. A particular reason for optimism among the walnut growers is the breaking of the drought which has prevailed in Southern California for three years.

The Paso Robles, California, Almond Growers Exchange will build a concrete warehouse 100 x 75 feet, with capacity of 1000 tons of nuts.

The Walnut Growers Department of the Farm Bureau in Southern California in co-operation with the Extension Service is making this month four field demonstrations on the control of walnut melaxuma, sometimes popularly known as black sap.

Pecan Trees Planted 31 Years Ago

Writing to the editor of the Albany Herald from Cuthbert, Ga., J. S. Davis says:

In 1890 I was editor of the Albany News & Advertiser, a paper that was published in the smallest town in the world that sustained a daily. Your editor-in-chief, H. M. McIntosh, and I were joint owners and co-editors of that paper for five years. The pecan industry was indeed in its infancy in Southwest Georgia. It was our policy as well as delight to further as best we could every interest that promised to benefit the section. Something published in our paper about pecans attracted the attention of a Mississippian and he sent about five pounds of nuts to the paper.

I distributed them, and among those who received and planted the nuts was Mrs. J. McK. Gunn, of Cuthbert, Ga. About five of the trees are now living, 31 years old.

I have just seen them. To say that I was astonished is putting it mildly. They are over two feet in diameter, six feet in circumference, and have a heavy fruitage. They yield from 250 to 300 pounds of nuts every year, each.

One hundred acres of such trees would yield five thousand pounds of nuts per acre, or five hundred thousand pounds. Translated into the term of dollars, bringing fifty cents a pound, it would be \$250,000.

Why can't our people appreciate the possibilities of pecan culture in this God-favored section? Why won't they plant pecans and make some personal sacrifices long enough to get them into bearing, and then live as independently as nabobs all the rest of their lives?

Horace advised the planting and cultivation of fruit trees 2,000 years ago, but his sensible suggestion has been practically unheeded.

In a Southern Alabama community, a gentleman has 14 acres in pecans which in the year 1919 brought him in cash for its nuts \$7,500.

Will not such facts as these transmute the dark pessimism of the day into a golden optimism?

We have the greatest section of the earth, and the pecan industry is the key stone to the arch of our future prosperity. It has long since passed the experiment stage. It is as certain as any human hope of this mundane sphere can be made.

The successful marketing of 40,000,000 pounds of walnuts in 1921, a year of unusual business uncertainty, under the direction of Manager Carlyle Thorpe of the California Walnut Growers' Assn., is something of an achievement.

Hales Hickory

Editor American Nut Journal:

We notice in a last fall issue on page 36, that Mr. W. G. Bixby writes in regard to source of supply of grafted hickory trees. We have about 200 of the Hales Paper-Shell hickory. These trees range from three to ten feet high, and are grafted on pecan stock grown from nuts that we had shipped from state of Indiana. We can supply any of your readers with this fine thin-shell hickory as long as they last.

SIMPSON NURSERY CO.

Monticello, Fla.

C. A. Simpson.

MEMBERSHIP DRIVE**National Nut Growers Association****\$2.00 Per Year—Limited Offer**

By direction of the Executive Committee of the Association the Membership Fee has been reduced to \$2.00 for the limited period of the present Membership Drive.

REGULAR YEARLY RATES

Association Membership.....\$4.00
American Nut Journal..... 2.00

SPECIAL YEARLY RATES

Association Membership } \$3.25
American Nut Journal }

Address J. Lloyd Abbot, Sec'y.
Route 1, Spring Hill, Ala.

A Valuable Heritage

Max Munzesheimer, who was for several years superintendent of White Rock, Tex., and is still much interested in that city property, recently made an investigation and found that fully 75 per cent of the native pecan trees grafted under his direction are living and some of them are bearing very fine nuts. In all he had grafted about 150 trees. There are about 200 more to be taken care of in this way, and Mr. Munzesheimer is going to urge the mayor and city commissioners to have the work done.

"White Rock is the greatest natural playground in Texas," said Mr. Munzesheimer, "and I hope our city government will year by year make some improvements. These pecan trees are a valuable heritage for the next generation."

Birch Douglass, Kinston, N. C., is planning a large pecan plantation.

Beat the Grandchildren To It

Cuero, Tex., March 11—County Commissioner W. H. Schweizer, who represents the Yoakum precinct, brought down with him at the last term of court, a box of choice pecans, which are to be planted about the court house grounds. Already there are several bearing pecan trees on the court house lawn, and one tree, especially, bore a heavy crop of choice nuts.

About ten years ago, Mr. Schweizer set out a young pecan orchard on his farm at Hochheim, though his neighbors and friends told him he was planting for his grandchildren. But this past year more than 1600 pounds of nuts were taken from these trees, and as they were choice enough to bring as high as \$1 per pound for planting purposes, the venture has not proven unprofitable, and will grow more valuable each year. In fact, some of the ones who scoffed a few years ago at the project are now planting pecan trees.

The trees are still small on the Schweizer farm, and it has not become necessary to quit cultivating the land. Crops of corn and cotton are grown between the rows of trees, and the pecan crop is as yet a side line on this little place of 120 acres.

Look for a New Variety—Knight Percy, Salem, Ore., says: "Now is the time for owners of seedling trees to examine the nuts to determine whether they possess a seedling which has superior merit. Among the thousands of seedling trees growing over the Willamette valley there are probably a few trees producing nuts which are superior to our grafted varieties. When such trees are discovered they should become the source of grafting wood from which may be propagated a new variety."

Urging Planting—A Nursery concern in Oregon advertises: "Walnut prices and production have been more uniform and higher than any other crop in Oregon as compared with cost of growing. Consumption is growing faster than production, which was shown by the shortage last season, and will undoubtedly continue. You cannot go wrong by planting walnut trees on suitable land. Plant this season while trees are available at reduced prices."

Result of Planting a Seedling—Dr. B. S. Shinness has some pecans which were produced on a tree on his father's farm in Jefferson county, Indiana. The tree was set out by Mr. Shinness thirty-five years ago and this is the first time that pecans have ripened on it.

If it relates to nut culture it should be in the AMERICAN NUT JOURNAL. Please send it in.

Budded and Grafted

HARDY NORTHERN NUT TREES
Best varieties, grown in natural nut soil. Send for catalog. Have your seedling nut trees topworked to these fine varieties.

Information and estimate on request.

INDIANA NUT NURSERY
Rockport. J. F. Wilkinson, Prop. Indiana

HALES HICKORY

Grafts obtained direct from original tree, are on Northern pecan roots. Have pecan trees also.

SIMPSON NURSERY CO., MONTICELLO, FLA.

THIS SPACE

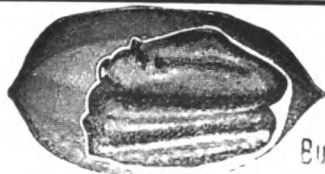
\$2.50 Per Month Under yearly Contract

Under less than yearly term:
\$2.80 Per Month

Texas Pecan Nursery

Arp, Texas

THE PEOPLE THAT GROW
WELL-ROOTED PECAN TREES

**NEW EDITION FREE**

A practical guide showing how to bud pecans. Tells how to grow trees 12 inches in diameter by the end of the 8th year, which yielded 400 lbs. nuts per acre.

Trees, Nuts, Groves for sale direct without agent at attractive reduced prices
B. W. STONE, Thomasville, Ga.

Wanted: A MANAGER

With experience for Pecan Shelling Plant.

GULF COAST ORCHARDS SYNDICATE
68 E. GAY ST., COLUMBUS, OHIO

SUCCESS

and other leading varieties. Also citrus!
BECHTEL PECAN NURSERIES
Ocean Springs, Miss.

PECAN TREES

Plant them this year! Buy direct from nursery and save agent's profit. All standard varieties; quality and service the best. Write us for prices.

FLORIDA NURSERIES

W. W. Bassett, Prop., Monticello Fla.

AMERICAN NUT JOURNAL

Of National Circulation

Covering Every Phase of Nut Culture

Subscription: -
Advertising: -

\$2.00 Per Year
\$2.80 Per Inch

Official Journal

National Nut Growers Association
Northern Nut Growers Association

AMERICAN FRUITS PUBLISHING COMPANY

39 State Street, Rochester, N. Y.

For Westchester County, N. Y.

Mr. H. C. Forchers, Wenga Farm, Armonk, N. Y.:

While English walnuts have been growing in the upper part of New York city and in the Hudson Valley for many years and have grown to be quite large trees, they usually freeze back in some winters and I have not noticed that they bear a large crop. It is only fair to state in this connection however, that these are practically all seedling trees and the other varieties might do better. I would not, however, at this stage advise commercial planting in Westchester County. In a rather limited section of Niagara County, however, the English walnut seems to do pretty well. It freezes back some winters but the large body of water to the north tempers the climate so that the extreme colds of winter are avoided and the limestone soil there seems particularly adapted.

In regard to the pecans, I feel quite certain that the trees would grow in Westchester County, and probably there would be little or no winter killing after they had become established. As to how well they would bear, I do not feel so certain. While the pecan will stand cold winters without difficulty, apparently it takes a rather long, hot summer to mature the nuts. Pecan is native and grows and bears well in Burlington, Ia., which is in the latitude of New York City, but the heat of summer in this location is greater than New York City, and considerably more than in Westchester County. It is possible that some varieties of pecan will bear with you. At the present time I do not advise commercial planting of pecans in Westchester County, but do believe a few varieties around the home are worth setting out in order to try them.

You may wonder that if the Northern Nut Growers Association does not advocate commercial planting of pecans or English walnuts in your section at the present time, what it does recommend. The black walnut, I presume, is a native with you. I know it is considerably farther north and it is native here. Some fine varieties have been discovered, the kernels crack out easily and are well flavored. An investigation made some time ago showed me that for certain purposes confectioners would pay more for black walnut kernels than they would for English walnut kernels, and there is a demand for black walnut kernels which is never supplied. Black walnut trees can be expected to bear at about the same age as apple trees.

I do think that in all probability what gives the most progress encountered in your county is top working young hickory trees. Some hickories have been discovered with shells so thin that the nuts may be cracked in the hand as English walnuts can. There is no nut better flavored than a good hickory. While grafted transplanted hickory trees are rather slow to bear, as we have knowledge at the present time, yet when young hickory trees are top worked with scions these fine hickories, bearing in two or three years after top working are not at all unusual. There are two or three species of hickory native in your section; Top working your hickories is a most promising field at the present time. I feel very certain that the fine hickories which you now have would sell at prices approximating those paid for the fine Southern pecans, as soon as they can be produced in commercial quantities.

WILLARD G. BIXBY.

Walnuts For Logged-off Lands

Restoration of devastated and unprofitable areas of Washington and the entire Northwest with walnut trees is the dream of R. J. MacDuffee of the Washington Burbank Walnut Nursery, located in Clarke County, with offices in the Lowman Building, this city, says the Seattle, Wash., Times. This man declares he is engaged in a great work, which will benefit not only the present generation immensely, but posterity as well. Timber can be cut in 10 years, it is said. As an indication of his faith in the enterprise he is planting an additional 97 acres with more than 5,000 walnut trees in Clarke County near Vancouver, Wash.

"In planting from the nursery to our logged off land we slashed a little place free from brush between the stumps," said MacDuffee. "Taking a crowbar we jammed a hole into the ground about two or three feet. Then we dropped half stick of powder and shot the hole. Then spaded up the dirt, pulled out the broken roots and carefully planted our trees, laying the roots out in their natural positions and tamped the dirt well.

They need no pruning and no attention after getting a good start.

"The mother tree from which all these trees come made a profit in wood growth value of \$5 a month for every month since it was planted. If our 97 acres do as well as the mother tree we should get from this one planting alone from one to five million dollars in a few years."

Luther Burbank produced the mother tree from which the Washington Burbank Walnut Nursery has derived its stock, according to an official of the company. He has spent more time in developing a black walnut tree suitable for the Northwest than in almost any other of his achievements.

In 240 months a tree which he had developed by crossing varieties made a growth of 96 feet in height, with a spread of limbs of 66 feet and more than three feet in diameter 12 feet above the ground. The timber in this tree was worth \$1,200. In quality the timber was pronounced by eastern piano manufacturers superior to the natural walnut of the East.

It is the hope of the Washington Burbank Walnut Nursery to see thousands of acres of logged-off lands planted to these walnut trees within the next few years.

Shade And Food

Somewhere in a government bulletin there is an entertaining and suggestive speculation on how the nation's food supply could be increased by planting nut trees as shade trees. No one advises turning our lawns and roadsides into one grand nut orchard, but there is a point here with a moral: the moral that efficient intelligent development of our country's resources is a plain obligation of citizenship. The Government is ready to help with all sorts of bulletins, carefully prepared by experts and cheerfully supplied on application.—Exchange.

Why should nut trees or fruit trees not be planted along the roadways and fence lines? There are long stretches of shadeless road that would be improved greatly by the planting of many trees. It seems incomprehensible that throughout the years trees have not been planted along the roadways and fence lines.

Had walnut trees been planted along the roadway in Central Kentucky fifty years ago they would today not only furnish shade, add to the beauty of the landscape, help prevent the changes that have come from deforestation, but would in all probability equal in value the land along which they were planted.

Nicotine Sulphate Dust

The walnut aphid, the insect that destroys the foliage of the walnut groves of California, can testify to the narcotic effect of nicotine. Because the insect feeds upon the under side of the leaves it is very hard to control with ordinary spray application, but 2 per cent, by weight, of nicotine sulphate at 40 per cent strength mixed with kaolin to give the poison bulk will go wherever the insect goes. The nicotine is applied to the foliage in the form of dust, which permeates to every crevice and leaf fold. A single touch of the mixture is sufficient to make the aphid let go all holds and come tumbling to earth.

Trees of Memory

A former member of Battery B, 149th Field Artillery, who has a farm near Chicago, has planted a tree for every one of the 200 members of the battery; for the living a hard maple; for the dead an oak. Every tree is to be marked with the name of the soldier it represents.

"By the time the slow growing oaks and maples have attained their full maturity," says the New York Herald, "the last of the brave men they represent will have passed away. It will be a grove of the dead, in a way. But only in a way. It will be a grove of living trees of memory, and who shall say that those top-most oak and maple boughs, pointing heavenward, are to carry no meaning, no inspiring message to Americans of generations yet unborn?"

A Pointer For Women

In a recent issue the Decatur, Ill., Review said:

Women who want silk dresses might take a pointer from the experience of a woman whom H. D. Spencer spoke about last evening in his talk on "Nut Trees" in the Farm Bureau building. Her husband, who is a New York state nut grower, declined to buy her the desired gown but told her she could have the crop of nuts off one of his trees. She tickled the soil around the roots and secured a nut crop in the fall which netted \$300.

Mr. Spencer told his audience more about nuts than most of them knew before, and illustrated his talk with some magnificent slides from the Department of Agriculture. He made the point that there are 20,000 acres of waste land in Macon county which might well be planted to nut-bearing trees and so be made to produce a larger return than the same number of acres in wheat. He strongly recommended the planting of nut trees along the lake shore drives for shade and ornamentation in preference to box elders, soft maples and short-lived trees.

English or Persian walnuts, Mr. Spencer said, were probably ill-suited to the Illinois climate, but most others would flourish well here. A good walnut tree will produce from five to 18 bushels a season. The meats will sell at 80 cents a pound and ten pounds can be secured from a single bushel. Twenty trees can easily be accommodated on a single acre. No doubt exists as to the food value of nuts, one pound having the nutritive value of four pounds of meat. Their fats are more healthful than animal fats, and they are rich in vitamins.

Members of the city plan commission were at the lecture.

Forty Peanut Products Already—Dr. George W. Carver of Tuskegee Institute finds that the sweet potato and the peanut "provide a perfect rotation for keeping up the soil." Together they furnish a perfectly balanced ration for man, and a great variety of products can be expected from each. In Washington he exhibited 40 from the peanut, including four kinds of breakfast food, an ice cream flavor, mock oysters, a Worcester sauce, a chop suey sauce, a peanut coffee, a face pomade, an ink, several dyes, wood stains, oils, and most important peanut milk from which milk, cream, butter, whey, curds and cheese can be taken. In peanut milk the protein, or strength-giving matter can be varied, so that it contains more than cow's milk, or a maximum of 32 percent. More than 100 products can be taken from the sweet potato, and over 200 from the peanut. Some of these are already on the market.

Hawaiian Nut Oil—The territory of Hawaii plans to grow on an extensive scale the chaulmoogra tree, from whose nuts are derived the oil specific which has demonstrated its ability to definitely arrest leprosy. Already one thousand seedlings are thriving vigorously on this island and more will be planted in favorable locations when the seeds are received from Burma, according to C. S. Judd, superintendent of forestry.

Just mention AMERICAN NUT JOURNAL.

THE PECAN INDUSTRY—SOME FACTS AND FIGURES BASED UPON ACTUAL EXPERIENCE

Editorial in The Albany Herald, Albany, Ga.,
Tuesday, Jan. 10, 1922

Partly because it is published in the very heart of what has become known as the greatest pecan-growing region in the world, and partly, too, perhaps, because it has been a consistent yet conservative booster of every progressive movement, legitimate enterprise and commendable undertaking in its territory, The Herald receives many inquiries with reference to the pecan industry. These inquiries come mostly from the North, and some of them come from persons who have already made investments in pecan groves and who ask pointed questions with reference to the present or prospective value of their investments, the character and reliability of the promoters with whom their investments have been made, etc., etc.

These inquiries are usually addressed to the editor in person and are not infrequently marked "confidential." To answer all such inquiries in detail would be—well, let us say not feasible, and let it go at that.

One of the questions most frequently asked is: "What do you think of the pecan industry as an investment?"

Desiring to obtain reliable information that is based upon actual experience, with the view of condensing into concrete form a statement that may be used in answering all these inquiries, we have called upon a man who, in our opinion, is wholly competent to furnish us with the necessary data, Mr. J. M. Patterson, President and General Manager of the Paper Shell Pecan Growers' Association, whose extensive groves are located around Putney, eight miles south of Albany.

When Mr. Patterson was approached with the request for a statement he was reminded in what he may have considered a sort of patronizing way that the article in contemplation by The Herald would be a good advertisement for his groves. His reply was that he didn't really feel the need of any advertising, as he didn't have anything to sell except nuts, and he had no trouble in disposing of all these he could produce. He added, however, that he would be glad to furnish us with any information he had accumulated out of some twelve or fifteen years of actual experience for the benefit of others and in substantiation of what The Herald had been claiming for the pecan industry in the Albany district.

The information obtained from Mr. Patterson is real information with reference to the pecan industry, for it is based upon experience. In other words, Mr. Patterson tells what has been done, and leaves nothing to be guessed at or imagined. He is a thorough business man, and as the groves of which he has the management are largely the property of other people, he has conducted the enterprise on strictly business principles, employing competent men, including a good bookkeeper, and "keeping tab" on every detail of expense and income, and as his groves have now, for the most part passed through the infant or non-producing stage to the age at which they are producing nuts in commercial quantities, a definite idea may be had of what may be done—nay, of what has been done—with pecan groves in this region.

Now, without further preliminaries, for the facts and figures covering the Patterson groves:

The Paper Shell Pecan Growers' Association is composed of people (mostly in Chicago) who purchased pecan units from Patterson & Taylor. Patterson & Taylor began operations in Georgia fifteen years ago—when pecans were a promise and hope—but not a demonstrated commercial industry. After the death of Mr. Taylor nine years ago, Mr. Patterson moved from Chicago to Putney to give his personal at-

tention to the development of the pecan groves. Since that time some additional groves have been planted at DeWitt.

The age of the groves in the Paper Shell Pecan Growers' Association range from seven to fifteen years, averaging about eleven years old.

The Paper Shell Pecan Growers' Association was conceived by Mr. Patterson as a means of obviating the objections to non-resident and small unit ownership of pecan groves. The association cares for the groves, charging the owners actual cost of care, and gathers and markets the crops at cost. Each acre of grove of a given age receives the same care and is credited with the same number of pounds of nuts each year as every other acre of the same group. While the members of the association own their particular units, yet for the purpose of care and crop, these units in effect represent so many shares of stock in the association.

The association gathered its first crop of nuts in 1913. The crop that year was 6,000 pounds.

The 1921 crop totaled in excess of 400,000 pounds.

Since this association was organized it has harvested approximately one and one-quarter million pounds of pecans. The average price at which these pecans have been marketed has varied from 32c per pound in 1913 to 62c per pound in 1920.

Over one quarter of a million pounds of the 1921 crop have been marketed at an average price of over 55c per pound.

The association has always planned to establish a pecan shelling plant, but until this year the supply of pecans has not justified such a move. The large crop of 1921 has made it practical to take up the shelling business, and the association has installed a battery of shellers and is now shelling pecans and selling pecan meats.

For the last four years the older groves in the association have been paying dividends averaging from \$40 to \$80 per acre.

The 1921 crop will pay dividends on the older groves of approximately \$100 per acre.

These groves were sold by Patterson & Taylor at from \$200 to \$250 per acre.

It will be seen therefore, that investors in these groves have no reason to regret their investment. In fact, very few of these groves could be bought at any price, and the older groves are valued at from \$800 to \$1,000 per acre.

On these groves very little commercial fertilizer has been used. Cow peas and velvet beans have been planted and plowed under for years. It is Mr. Patterson's conviction that as pecan groves advance in age more plant food must be supplied, and this year the association will use commercial fertilizer on all its groves that are twelve years old.

It is the determination of the association to do anything that is necessary and spend any funds required to build up the groves under its care to an ever-increasing standard of efficiency. This association has been the pioneer in advanced cultural methods and also in the introduction of grading machinery and warehouse equipment.

As an evidence of the increasing consumption of pecans Mr. Patterson tells us that the association has customers who bought five or six barrels of pecans a few years ago and are now ordering a hundred barrels or more each year. A high standard of grading has been one of Mr. Patterson's hobbies, and it is bearing fruit in the retaining of customers and in the unusually high average price which the "Crown Brand" (the Association's brand) commands in the market.

These groves will doubtless inside of five years be producing pecans by the millions of pounds instead of by the hundreds of thousands of pounds.

The statements here made, based upon demonstrated facts, all of which may be verified, tell their own story and render any expression of opinion of The Herald as to the merits of the pecan industry in this region wholly unnecessary.

The Cultivated Pecan in Texas

A. C. Easley, who is the owner of one of the finest farms on the Bosque, is not only a believer in diversification, but puts it into practice.

A good many years ago Mr. Easley was a citizen of Waco. At that time he saw the possibilities of the pecan—saw that if properly cultivated, and with very little effort and expenses, the pecan could be made to yield large returns.

Today Mr. Easley is "cashing in" on the vision he had eight years ago. He brought to the Times-Herald office Monday some of the largest and finest paper shell pecans

ever produced here or anywhere else. Speaking of the yield, Mr. Easley said that they averaged 27 pounds to the tree, one tree producing a total of 46 pounds. Fifteen trees on one acre produced 400 pounds of these fine nuts.

Mr. Easley's trees are natives that have been cut back and grafted. He is also exhibiting, along with the cultivated nut, the smaller pecan, showing what cultivation has done in eight years' time.

Ten different varieties are being grown by Mr. Easley, and he is rightfully proud of the results obtained in the cultivation of pecans on his place.—Waco, Tex., Times-Herald.

CONSULTING TROPICAL HORTICULTURIST and TREE EXPERT

HARVEY C. STILES

COLUMBIA, TEXAS

Specializing in Pecans, Grapefruit, Avocados, and Landscape Development. Long experienced expert for—and present active director of—many such large projects throughout tropics and semi-tropics. Examinations, Reports, Plans, Specifications and Estimates. Correspondence suggested.

THIS SPACE
\$2.50 Per Month Under yearly
Contract
Under less than yearly term:
\$2.80 Per Month

Just mention AMERICAN NUT JOURNAL.

BUDDED and GRAFTED Nut Trees

Start right with my hardy Pennsylvania grown trees and be assured of success.
Attractive Catalogue Free.

I have this season a fine lot of stake-trained Pecan, English Walnut, Black Walnut and Persimmon trees budded on root pruned transplanted stocks, that will please you and that will transplant easily and safely. Write for catalogue.

J. F. JONES, The Nut Specialist
LANCASTER, PA.

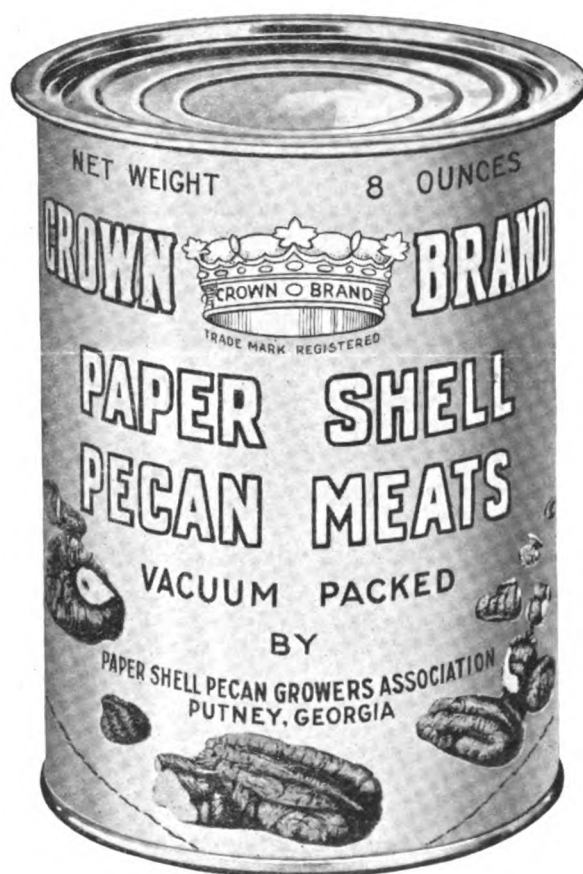
American Nut Journal

**DEVOTED TO NUT GROWING INTERESTS
GENERALLY THROUGHOUT THE AMERICAS**

Vol. XVI, No. 5

MAY, 1922

Per Copy 20c.



**First Appearance on the Market of
VACUUM-PACKED PECAN MEATS
The Crown Brand in Tins and Glass Jars**

39 STATE ST.



ROCHESTER, N. Y.

American Fruits Publishing Co.

PECAN CULTURE IN FLORIDA

C. A. Reed, Nut Culturist, U. S. Department of Agriculture, Washington, D. C.—Florida State Horticultural Society, Ocala, Florida, May 4 to 7, 1920

FLORIDA has a set of conditions peculiar to itself as regards its part in the pecan industry. Large, stately trees and scattered orchards in North Florida planted prior to 1920 give rank to the state as one of the pioneers in the cultivation of this nut. The profit which has been derived from many of the older trees and orchards affords ample proof that there is good money in pecan growing in Florida. The main question is not whether pecans can be grown with greater profit in some other state than they can here, but whether there is as much or more profit in growing pecans here as there might be in other crops if grown on the same ground. Another question is how to raise as good or better pecans in Florida as are raised in any other state, for unless this is done, Florida will not only be kept out of the northern markets, but her own markets will be supplied with pecans from other states.

That Florida marks the southern limit of pecan growing in the eastern states is obvious but whether that limit ends at Key West or some distance farther north has not yet been fully determined. We well know that the pecan species does not readily adapt itself to peat soils, nor to drifting sands, nor to poorly drained swamp lands. We know that for its best development it requires a fertile clay or sandy loam, moist, yet at the same time well drained. We know also that winter injury or sun scald, as it is also called, is very apt to be a serious menace in sandy soils unless underlaid with firm clay subsoils. With these facts as a basis, we know that conditions are much more favorable for pecan growing in that part of the state lying north of an imaginary line extending from New Smyrna on the east across to Tampa, than they are south of that line. Also that in general, conditions become increasingly more favorable as we go north of that line and, conversely, less so as we go south of it. It is, therefore, in middle northern, northern and in western Florida that we would naturally expect to find, and do find, the pecan industry the most highly developed.

There are very few pecan trees in southern Florida, although here and there stray trees are doing well, below the line we have arbitrarily established. Unconfirmed but reliably regarded reports have it that there are fine specimen trees in Miami and Ft. Meyers. Some years ago the writer visited a hundred or more thrifty young pecan trees near Lake Huntley, 35 miles east of Arcadia, and about as far north of Lake Okeechobee, on the very backbone of the state. As well as could then be judged the local conditions were by no means unfavorable to successful pecan growing. Many of the trees had been budded or grafted on stocks of a dwarf-growing species of hickory indigenous to that locality. Just how these trees are bearing or what their average performance has been, the writer can not say. He has no later information.

Florida is much like other pecan states in that the yield from her better varieties is almost in direct proportion to the fertility of the soil. Few of the soils in the state are closely similar to those of the more western sections in which, and only in which the pecan species is indigenous. There is no large area of alluvial soil anywhere in Florida. Nature never grew any great number of pecan trees far outside of the overflow river-bottom lands, except possibly in Mexico and there is serious doubt as to whether there are native pecans in Mexico or, for that matter, anywhere else in the world outside of the United States. At any rate, there are so few successful pecan areas outside of this country that it is useless to look beyond our own borders for information throwing further light on pecan growing.

Here in Florida as in other sections, the best results are invariably from trees about the farm or city buildings. Chickens, hogs, mules, or any other kind of live stock running under the trees, unless they injure some part of the trees, enable them to pay big dividends. It is the dooryard or barnyard trees that make the most rapid growth, have the richest color, the dense foliage, the

fewest dead branches, and bear the most regular and liberal crops.

Judging from the way pecan trees recently visited have performed in the past, and from the way they give promise to perform in the future, even though sometimes growing in pure deep sand, there is no reason why practically every home in middle and northern Florida should not have its own pecan trees, to salvage much of the plant food now going to waste from the chicken parks and barn lots. There are unknown possibilities in by-product pecan crops if managed in this way. Many aged couples in southern cities are today living comfortably because the taxes, insurance, and upkeep are being paid, with perhaps a margin in addition, by pecan trees, which these couples planted 15 or 25 years ago, while their neighbors planted oaks.

To get the most out of the pecan orchards already planted, Florida must add to the fertility of the soil. Cowpeas, beggar-weed, Lespedeza, velvet beans, or other leguminous crops must be grown and turned under year after year. There is little danger of over-enrichment of the soil, although that is possible. If it should happen, it could be quickly remedied by simply withholding the cover crop for a year or two.

In not a few of Florida's orchards, like most of the earlier ones planted in other states as well, the trees are too closely planted. The trees now have a great amount of dead wood and long spindling branches, void of laterals except near the ends. In case of non-bearing orchards, the alternate trees should be cut out to the ground and those remaining, headed back to stimulate new growth and reshaping of the trees. In less run-down orchards the alternate trees should be dehorned severely so as to promote this new wood. For a year, or possibly two years, the remaining trees can be allowed to go without being disturbed. The increased light and space temporarily allowed them will permit increased crops for the time being. As soon as the trees which were dehorned begin to take shape again, those originally left untouched should be done away with. In good soil sixty feet apart each way is now regarded as being about the most suitable orchard distance. That distance certainly is not too great. More space may yet prove to be better.

In planting budded trees, or at least trees grafted a foot and a half above ground are preferable to those budded lower, or to root-grafted trees. Trees propagated near or below the surface of the ground are much more subject to winter injury, or sun scald, as we are calling it, than are those worked well above ground. This is because low working does away with, for upwards of ten years, the natural scaly bark of the seedling about the trunk intended by nature as a means of winter protection.

We are all familiar with the smoothness of the bark above a bud or graft as contrasted with that below. When this smooth bark, which is full of life to very near its outer surface, is brought to the ground level, the warmth of the sun in winter, reflected from the earth's surface, usually on the southwest side of the trunk, causes the wood cells to swell up and to make ready for growth. A freeze during the following night catches the sap, injures the cell structure, and the harm has been done. This is followed by what is known as "sour sap," and some kind of action not clearly understood but which is known to be decidedly destructive to the affected area.

Occasionally, the injured tree recovers of itself before serious damage has been done. Sometimes relief is afforded by merely slitting the bark through the injured area and allowing the fermenting sap to escape. Not infrequently, the injury is unnoticed until the area so affected has enlarged and completely girdled the tree, causing death suddenly. With the exception of starved or de-vitalized trees, which are in a condition to succumb upon any slight pretext, it is the most vigorous and rapid-growing trees that are affected.

The remedy is, as has already been partly stated, to avoid low propagated trees, and quick growing sandy soils, especially unless underlaid by firm but not hardpan

clay subsoils, and to wrap the trunks of the trees each winter until five or six years old with burlap, heavy paper, rabbit veneer, or other material which will shade the trunks and protect them from the warmth of the sun during periods of freezing nights. As a precaution, it is well to avoid such cultivation and fertilization as tends to stimulate late growth in fall. Cultivation should be stopped by August at the latest.

In regard to varieties, we must be guided by two factors. (1) We must plant what will succeed in our locality; (2) We must grow what the trade wants and not what we may happen to fancy ourselves. So far as possible, we must also grow what our neighbors are growing, so that altogether we can have quantity enough to invite the wholesale trade. The trade can not and will not assimilate a great number of varieties or grades. With certain limits quantity and uniformity are of greater importance in the marketing of pecans than is quality. Quality must be good but not necessarily fancy. In quantity, the trade wants the things it knows about, and not the "just as good" kind.

From four to six varieties, when of well-selected sorts, is proving to be a very satisfactory and workable number for both the orchardist and the tradesman to handle. Intelligent selection with that number affords a prolonging of the blossoming and pollination period in spring, thereby enhancing the chances of avoiding bad weather, and it also makes possible the maximum length of the harvesting period. The cream of the pecan market for the whole year is that of Thanksgiving. We must have some varieties for that market. With large crops to harvest, it is of advantage to have a harvesting period capable of possible extension from October 10th to December 1st. With some varietal combinations in favorable years, it is possible to begin harvest by from September 15th to 25th, and under stress of labor shortage, inclement weather or similar condition, it sometimes happens that the crop can not be gathered until late in December. In southwestern Georgia, the crop of 1918 was not all garnered until the first days of January. In dry West Texas, nuts from the wild crop of 1919 were still being harvested during the first part of March, 1920.

Taking together all the points in regard to varieties that have thus far seemed of leading importance, from the standpoints of both the producer and the tradesman, the Schley, Alley, Pabst and Stuart may well be regarded as being the big four of the major portion of the pecan territory. In this part of Florida, these sorts do not seem to give as satisfactory returns as do some others. They do well here in the Florida climate only in the richest soils. With maximum conditions of soil and moisture, some of these have in a number of known instances performed very satisfactorily, notably on the north bank of Lake Santa Fe near Waldo, and in St. Augustine. Nuts from the former locality have several times won first premiums at meetings of the National Nut Growers Association.

On the whole, results to date indicate that the Bradley, Curtis, James, Moore and President, though not necessarily in that order, are among the surest of the good varieties for Florida use. Other good ones of which you may know and be inclined to plant are Delmas, Frotcher, Hume, Kennedy, Money-maker, Randall, Success, and Van Deman. Each of these has been omitted for a definite reason. The Delmas and Van Deman are seriously subject to pecan scab; the latter is in addition a shy bearer unless given special nourishment. The Frotcher is a shy and undependable bearer. It is being abandoned in the older orchards where it is best known. The Hume, Kennedy and Randall are all good varieties, and by some rated as being among the best for middle Florida. All are sister seedlings to Curtis and unless superior to it in some ways, there is no good reason why they should be used in preference to it. They are, however, too good to cut out from orchards already planted, but for uniformity sake, until we know definitely that these sorts are superior to Curtis, let us stick to that variety in future planting.

The Money-maker is very desirable in some ways. It is an excellent bearer, bearing at an early age and bearing regularly.

(Continued on page 63)

AMERICAN NUT JOURNAL --- MAY, 1922

EDITORIAL DEPARTMENT—Communications on any subject connected with Nut Growing and Distribution are cordially invited by the editor; also articles on this subject. We shall be pleased to reproduce photographs of trees of interest, methods and scenes connected with the Nut Industry; portraits of individuals, etc. Suggestions are cordially welcomed.

ADVERTISING—Advertising forms close on the 10th of each month. If proofs are wanted, copy should be in hand on the 1st.

Advertising rate: 20 cents per agate line; \$2.50 per column inch for any amount of space.

Advertisements that do not represent reliable concerns will not be accepted.

SUBSCRIPTIONS—The "American Nut Journal" will be sent to any address in the United States for \$2.00 a year; to Canada or abroad for \$2.50 a year. Three years: In United States, \$5.00; Canada, \$6.50.

Add ten cents for exchange unless bank draft, express or postal money order is used.

WHAT THIS JOURNAL STANDS FOR—Reliable information on all phases of the Nut Industry. It is for the advancement of Nut Growing in general; it is in no way confined to the interest of a particular kind of nuts, nor of a particular section. It is broad in scope and absolutely independent. The aim of "The American Nut Journal" is to stimulate thousands of persons into developing interest in one of the greatest food supplies of the future—to line the roadsides and fill the waste places with trees of a sort which yield dollars worth of fruit every year instead of the mere bunches of leaves resulting from present shade and ornamental planting. At the same time it will record the progress of the industry, the latest descriptions in the note book of the biologist and plant physiologist, the rapidly expanding knowledge of methods, the increasing acreage, and in short the news as it develops of an industry whose importance is recognized by an increasing number of persons in all sections.

Entered as second-class mail matter June 6, 1914, at the post office at Rochester, N. Y., under the Act of March 3, 1879.

AMERICAN FRUITS PUBLISHING COMPANY, Inc.

Ralph T. Olcott, Editor and Manager

121-123-125 Ellwanger & Barry Bldg., Rochester, N. Y.

Classified Business Announcements In This Issue.

Bassett, W. W. Pecan Trees	62	Nut InformationSpecial Topics	55
Bechtel's Pecan Nurseries... Grafted Pecan Trees	62	Nuts as Staple Food..... Dr. J. H. Kellogg.....	55
Florida Nurseries Pecan Trees	62	"Nut Trees for the North". Expert Advice	55
Indiana Nut Nursery..... Northern Pecan Trees.....	62	Simpson Nursery Co..... Hale's Hickory	62
Jones, J. F.Grafted Nut Trees.....	64	Stiles, Harvey C..... Tree Expert	64
Lancaster Nut Nurseries....Northern Nut Trees.....	64	Stone, B. W.Pecan Trees, Nuts, Groves.....	62
"Nut Growing" New Book	60	Texas Pecan NurseryBudded Pecan Trees.....	62
		Wilkinson, J. F.Grafted Pecan Trees.....	62

IMPORTS OF NUTS INTO THE UNITED STATES, FOR CONSUMPTION, DURING THE LAST THIRTEEN YEARS

(Compiled by Bureau of Commerce and Navigation, Department of Commerce, Especially for the "American Nut Journal.")

KIND	1907	1908	1909	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919
Almonds—not shelled.....lbs.	5,714,207	8,515,688	2,120,632	6,810,056	3,762,654	5,242,563	2,363,860	5,501,069	4,684,598	2,368,369	4,901,168	6,149,374	7,482,586
Shelled.....lbs.	8,717,952	8,556,162	8,538,054	10,495,750	12,160,636	11,692,968	12,655,067	13,896,621	12,168,153	13,210,668	19,180,268	21,544,757	28,007,908
Apricots and peach kernels lbs.				27,854	13,551	7,939	18,769	18,572	67,164	11,926	250,075		
Coconuts in the shell... Dollars	\$1,349,380	\$1,439,989	\$1,246,463	\$1,298,970	\$1,704,262	\$2,012,203	\$1,793,713	\$2,150,500	\$1,593,666	\$1,891,328	\$2,583,560	\$2,490,368	\$4,063,262
Coconut Meat broken or Copra not shredded, desiccated or prepared.....lbs.	7,064,559	14,121,576	23,742,518	20,830,539	38,081,984	61,505,787	34,283,592	44,459,158	88,690,382	108,507,765	247,043,127	430,649,332	258,637,781
Desiccated, shredded, cut or similarly prepared.....lbs.	3,476,698	5,584,652	5,461,602	5,985,308	6,661,850	5,396,465	6,826,095	9,307,924	5,866,806	7,947,380	10,491,706	20,269,909	29,637,674
Cream and Brazil.....bu.	280,633	310,418	409,644	461,496	277,679	21,601,008	11,933,139	11,431,531	21,483,319	12,499,217	16,230,023	11,282,088	43,076,358
Filberts—not shelled.....lbs.	9,860,280	8,997,246	7,365,837	10,026,961	10,064,987	8,375,860	8,586,276	10,36,072	10,922,248	10,003,552	16,468,547	7,432,524	16,747,349
Shelled.....lbs.	1,553,332	1,343,594	1,384,689	1,413,391	2,332,606	1,368,835	1,450,620	1,798,147	1,722,705	1,259,540	2,280,757	4,245,853	3,778,906
Marrons, crude.....lbs.				10,270,398	9,968,879	14,845,345	10,157,351	18,849,257	12,549,959	15,754,796	6,275,030		5,021,146
Olive nuts, ground.....Dollars	\$1,016	\$1,027	\$580	\$178	\$236	\$206	\$312	\$385	\$25	\$112	\$420		
Palm and Palm Nut Kernels "	\$3,350	\$2,250	\$2,752	\$6,907	\$5,744	\$7,970	\$4,872	23,127	31,900	1,104,885	626,435	16,905,313	5,610,056
Peanuts or Ground Beans.....lbs.	10,432,828	6,498,202	7,326,371	11,297,172	11,055,823	12,690,433	12,140,612	17,298,778	14,075,387	9,623,411	7,710,062	1,970,797	5,667,354
Shelled.....lbs.	4,780,054	1,775,946	1,302,919	16,089,919	7,821,505	3,127,829	7,823,173	21,819,101	11,695,507	19,739,888	27,548,928	67,746,831	24,179,687
Pecans.....lbs.		1,118,071	1,480,289	3,349,460	2,333,037	2,607,227	1,893,434	2,621,161	2,032,539	1,265,382	4,076,933		
Walnuts—not shelled.....lbs.	23,036,646	21,427,853	17,432,885	23,269,974	21,146,116	22,206,845	16,363,046	16,134,211	20,988,326	22,610,418	17,177,992	3,304,003	21,235,078
Shelled.....lbs.	7,199,968	7,098,958	8,781,908	10,960,988	11,244,054	10,713,286	10,083,622	11,636,053	10,552,956	13,445,790	12,257,593	9,707,401	10,260,899
All other shelled or unshelled, not specially listed.....lbs.	10,598,186	10,441,327	9,938,337	3,584,544	2,962,663	3,050,989	3,690,056	7,426,313	3,272,492	2,772,589	2,769,634		
Total of nuts Imported Dollars	\$9,315,891	\$9,563,742	\$8,549,987	\$12,775,196	\$14,265,572	\$15,626,485	\$13,508,307	\$19,815,713	\$16,865,244	\$20,594,434	\$33,667,686	\$49,930,283	57,499,04

a—pounds.

Nut Culture Information

Reprint folders on topic discussed in American Nut Journal. 10 Cents Each

Grafting and Budding the Walnut—U. S. Dept. Agriculture.
Pecan Areas of the United States—W. P. Reed.
Walnut Trees For New England—Dr. Robert T. Morris.
Some Walnut Varieties—Dr. L. D. Batchelor.
Chip Buds For Nut Trees—Charles L. Edwards.
Grafting, Budding, Topworking—Dr. W. C. Deming.
Breeding Chestnuts for Disease Control—U. S. Dept. Agr.
Advent of Nuts as Staple Food—Dr. J. H. Kellogg.
Pecans As An Investment—Herman C. Locke.
Underworking Nut Trees—Charles L. Edwards.
The Ubiquitous Black Walnut—T. P. Littlepage.
Average Yield of Pecan Orchard in S. W. Georgia.
Value of Nuts As Food—Dr. W. C. Deming.
Improved Black Walnut a Good Investment—Henry Stabler.
Status of Pecan Industry—C. A. Reed, U. S. Nut Cultivist.
Grafting Tardy Walnut Trees—Judge Charles L. McNary.
Sources of Supply of Hazel Nuts—Bulletin Imperial Institute.
Top-Grafting the Walnut Tree—Ferd Groner.
Black Walnut As a Meat Producer—Henry Stabler.

Outline of Northern Nut Culture Activity—Dr. W. C. Deming.
Establishing the Filbert Grove—George Dorris.
Top-Working Northern Pecan Trees—J. F. Wilkinson.
Nut Trees for Highways and Public Places—W. S. Linton.
American Nut Culture—24-page Pamphlet Survey.
East Texans Reap Fortunes on Pecans.
Hazel Blight—Dr. Robert T. Morris.
American Nut Industry—C. A. Reed, Nut Cultivist.
What Nuts to Plant in Northern States.
Pecan Rosette; Practical Treatment—W. A. Weaver.
English Walnut: Where To Plant It.
Nut Tree Grafting by an Easy Method—Dr. Robert T. Morris.
Purchase of Chestnut Tree With Reference to Blight—G. F. Gravatt.
Quick Results in Pollenizing Pecans—E. E. Rislen.
Nut Trees to Reduce Food Costs—Chas. Lathrop Pack.
How To Guard Against Faulty Nuts—Harvey C. Stiles.
The Romance of the Pinon Nut Industry in New Mexico
Soil Fertility; Fertilizer Problems in Pecan Culture—J. J. Skinner,
U. S. Department Agriculture.
The Future of the American Grown Filbert—Richard H. Turk.

AMERICAN FRUITS PUBLISHING CO., 39 State Street, Rochester, N. Y.

Government Official Discusses Status of Pecan Rosette

The chlorotic group of diseases to which pecan rosette belongs has been recognized for many years by both farmer and scientist, and has presented to the investigator some of the most baffling problems relating to plant diseases and their control. Chlorosis or "yellowing" in plants has to do with a reduction of the chlorophyll or green pigment so essential to the manufacture of plant food out of the raw materials brought in from air and soil. Certain forms of yellowing or bleaching of green foliage, such as occur in plants grown in darkness or in the normal autumnal ripening of leaves are scarcely to be considered as diseased conditions at all. Furthermore, yellowing frequently follows some types of insect injury, such as that of root aphids on the peach and grape; and it is a constant accompaniment of certain diseases caused by parasitic bacteria and fungi, as in the bacterial black rot of cabbage and the *Fusarium* wilt diseases of cabbage and potato. The causes of such yellowing in the foliage are clear-cut and definite and the study of these diseases usually presents no special difficulty to the investigator.

There are, however, two fairly well marked types of disturbance in the green pigment—chlorophyll—comprising the chlorotic diseases *par excellence*. These are: (1) The noninfectious chloroses due directly to unfavorable soil or climatic conditions and (2) Those chloroses of unknown cause which, though often highly influenced by soil and climatic factors, are in reality transmissible from plant to plant either through grafting or by inoculation with the expressed juices from diseased plants. Familiar examples in the group of infectious chloroses are to be found in peach yellows and rosette, curly top of sugar beets, spinach blight and in the mosaic diseases of tobacco, potato, cucumber, beans, sugar cane and other cultivated crops and wild plants.

Among the noninfectious chloroses are to be found:

(1) The dwarfing effects of unfavorable soil or climatic conditions. (2) Starvation phenomena due to insufficiency or absence of essential food materials. (3) Chloroses caused by the absorption of injurious amounts of certain mineral or organic substances from the soil. (4) General yellowing due to insufficient or overabundant water supply. (5) Lack of the normal development of leaf green due to reduction of light. (6) Finally the yellowing due to lowering of temperature. All these forms of yellowing or chlorosis are rather general effects which are more or less comparable to starvation, over-feeding or direct poisoning. Changes in the structure, and in the functions or physiology of the plant may occur here, but these changes in the main tend to affect the plant as a whole or to affect all similar tissues of the plant alike. The leaves, for example, may be dwarfed but their shape or pattern remains unchanged. Again, where yellow mottling occurs it tends to affect all the leaves of a branch or of the whole plant alike.

In the infectious chloroses, on the other hand, deep lying alterations and derange-

ments in anatomy, in function or physiology, and in development of form and pattern may occur together in great complexity. Different types of derangement may be found in the same leaf. Points of over-development and lack of development of the internal tissues of the leaf may occur together within an area a quarter of an inch or less in diameter. Leaves normally oblong in shape may become long and ribbonlike. Parts of the plant may become dwarfed through lack of proper development in stem or branches, while other parts of the same plant are pushed into abnormally rapid growth or into growth out of season. No less far-reaching are the local derangements in function as shown by the altered manufacture and distribution within the plant of starch and other elaborated food products. These are specific parasitic diseases with a definite series of symptoms and with characteristics in general more complicated than those to be found in the chloroses due directly to environmental conditions.

To turn directly to the particular disease in question, we may say that pecan rosette is at least deeply influenced by its environment as has been shown by the early field studies of Orton and Rand.¹ The possibility of a parasitic cause was not entirely precluded by their results, but it was at that time thought highly probable that the ultimate cause would be found in some lack of balance in the raw food supply or possibly in some toxic substance or substances in the soil. McMurran² states as a result of his later field studies that 90 per cent of the cases of rosette are found under conditions indicating lack of humus, plant food materials, and moisture.

There occur, however, as discussed in detail by the writer in a recent publication,³ several factors disturbing to these theories of causation. Pecan rosette frequently appears on the tip leaves of a single branch and it seems as likely to affect a part of the tree first as to occur at once over the whole top. The disease has not been definitely and experimentally caused by any set of known conditions. Though it is more prevalent and severe under certain environmental relations it occurs to some extent in practically every soil type where the tree has been observed. Final proof of the cause must account for all cases of the disease.

Fertilizer and transplanting experiments and field observations indicate that rosette is affected, at least indirectly, by soil and climatic conditions. This, however, argues neither for nor against the soil causation theory since in many of the known infectious chloroses as well as in various diseases of bacterial or fungous origin infection and external signs of the disease are profoundly influenced by surrounding conditions. By growing mosaic diseased tobacco plants un-

der blue light or at certain temperatures the disease signs may become completely masked and the plants appear to recover. All the time, however, their juices remain capable of infecting healthy tobacco, and soon after removal from these experimental conditions mosaic signs again develop. Similarly, mosaic diseased potatoes show external signs of the disease when grown in Maine, but not in Colorado. The mosaic potatoes growing in Colorado are nevertheless still diseased since they are capable of infecting healthy plants, and themselves again show external signs when returned to a climate favorable to the development of these externally visible derangements. Here, as in many parasitic diseases both of plants and animals, though the parasite may be carried to remote parts of the body, it is only in certain definite locations and under certain definite conditions that it can reproduce itself or cause its characteristic derangements in the body attacked.

It is difficult to explain on the soil theory why in some cases a part only of a tree may be diseased, and why when two trees of the same age stand within a few inches or a few feet of each other the one may remain perfectly normal and vigorous while the other is stunted and dying back with rosette.

If pecan rosette is due to some chemical compound brought in from the soil in poisonous quantities one would expect the tissues along the veins to be first and most deeply affected and that the result would be seen over the whole tree at about the same time. Furthermore, if the yellow mottling is considered due not to a cause working outward from the centers of the spots but to a lack of sufficient water brought in by the veins, how are to be explained the lack of yellowing along the margins and the abnormally increased growth often evident around the margins of the yellow spots?

In the course of an exhaustive review of the literature on chlorotic diseases the writer has been forcibly struck with the similarity in symptoms and in the course of the disease between pecan rosette and the infectious mosaic diseases in general. This review led to a study of the internal derangements brought about in rosette as revealed by the microscope and by certain chemical tests. Here also, without going into technical details, the changes in internal leaf structure and function follow closely the conditions brought about in the infectious mosaic diseases.

In the writer's opinion, then, the "pathological picture" which pecan rosette exhibits to the observer is much more in agreement with the infectious type of chlorosis than with those conditions of foliage yellowing caused directly by soil or climatic conditions. As yet no adequate proof has been given to fully substantiate either theory. In other words the problem is not yet completely solved. This may seem strange to the mathematician or to the business man who assigns himself a clean cut problem and who expects and rapidly obtains a definite solution into "yes" or "no." In the study of living things, however, the multiplicity of unknown factors constantly hind-

¹ Orton, W. A., and Rand, Frederick V., 1914. Pecan rosette. In Jour. Agr. Research, v. 3, no. 2, p. 149-174, 1 fig. pl. 24-28.

² McMurran, S. M., 1919. Pecan rosette in relation to soil deficiencies. U. S. Dept. Agr. bul. 756, 11 p., 4 fig.

³ Rand, Frederick V. Pecan rosette: its histology, cytology and relation to other chlorotic diseases. 1922. U. S. Dept. Agr. Bul. 1038, 42 p., 12 pl. (1 col.)

FIRST IN THE FIELD WITH VACUUM PACKED PECAN MEATS

The rapidly increasing product of the groves of the Paper Shell Pecan Growers' Association, Putney, Ga., of which J. M. Patterson is president and general manager, has resulted in entry by the Association into the field of preparing and packing pecan meats for market in special containers, as well as marketing the nuts in the shell as it has been doing for years.

It was determined to pack according to the latest method—the vacuum pack. Manager Patterson visited the large manufacturing centers in contracting for the necessary machinery and appliances, and when the 1921 crop was ready, complete equipment was in place and the work of packing began. The vacuum-packed pecan meats of the Crown Brand are now on the market in form similar to the Diamond Brand vacuum-packed English walnut meats of the California Walnut Growers Association. They are in glass jars and tin cans appropriately labeled in colors.

General Manager Patterson discussing the subject with a representative of the *American Nut Journal* this month said:

"Regarding the pecan meats, which we are now packing 'vacuum' in glass and in tin, the vacuum pack is the solution of the problem of keeping pecan meats sweet and fresh. While pecans in the shell keep for a long time, if stored in a reasonably cool place, yet some of the meats will turn rancid in ordinary storage.

"The meats packed vacuum will keep indefinitely and the house-wife can always have fresh sweet meats on her pantry shelf. Furthermore, there is every year a per cent (sometimes larger, sometimes smaller) of pecans which are either shriveled or dark. To date, we have not discovered any method of eliminating these dark and shriveled pecans. To sell them in the shell is an injustice to the consumer and a great damage to the marketing of pecans.

"Our aim has always been to maintain a high standard of grades (size) and quality. To take care of the portion of the crop that is not up to standard, we have installed cracking machines and machines for packing the meats in glass and tin 'vacuum.' In this way we eliminate the defective meats and place on the market only strictly good meats. This means preservation of the market for pecans in the shell, salvaging the de-

fective portion of the crop and supplying fresh pecan meats to the trade twelve months in the year.

ers progress even as it beckons onward to further discovery. The relation between the complex and ever changing factors of soil and climatic conditions or of an unknown, living, ultramicroscopic parasite, and a host plant such as the pecan offers a problem of difficulty almost unbelievable to the uninitiated.

What then is to be done about the matter? Obviously the sane method of approach is to bend every energy to a full solution of the problem of the ultimate cause and the control of the disease, and in the meantime to follow a time honored custom among medical men who find themselves in a similar dilemma, namely, to treat the symptoms. In other words, to specifically apply this advice here, the orchardist may do his trees the justice of providing the best possible conditions as to humus, plant food and moisture. In many cases such treatment will enable the trees at least to partially overcome the effects of pecan rosette.

FREDERICK V. RAND, Pathologist,
U. S. Dept. of Agriculture,
Washington, D. C.

"Our Association is first of the growers of cultivated pecans in the field with this new method of marketing. We regard it as a very distinct step in the development of the cultivated pecan industry.

"Our glass contains three ounces of select-



THE GLASS CONTAINER
For the Crown Brand Pecan Meats

ed perfect halves; the tins contain eight ounces of meats, 90% halves and about 10% broken pieces. These pieces are useful for salads, salting and sugaring.

"Our containers are the last word in vacuum packages. The tins are lithographed in seven colors—key opener. We ship in cases, 12 or 24 to the case.

"It will take a little time and effort to introduce these packages to the consuming public, but we are confident there will soon be a constant and ever-increasing demand for vacuum packed pecan meats.

"In each tin, we place a list of recipes.

"Our Association will in the near future add a fire-proof cold storage warehouse to its equipment and will be engaged in cracking and packing pecans ten months in the year."

Chestnuts of Burma—J. F. Rock, agricultural explorer, U. S. Dept. Agr., who spent last winter traveling in the mountains of Burma, reports that the country is full of chestnuts. He believes there are two species of true *Castanea*: different from any he knows; large trees, one in particular with a trunk more than three feet in diameter and a spread like a banyan. He collected many specimens and gathered much information.

Northern Nut Growers Association

Secretary Deming has issued the Report of the Twelfth Annual Meeting of the Northern Nut Growers Association, Lancaster, Pa., Oct. 6-7, 1921. The Proceedings include much matter of great importance regarding the development of Nut Culture in the Northern states. Membership at \$2 per year includes a copy of each Annual Report.

Protecting Without Tariff

Development of the pecan industry in the United States and particularly in the Albany district was outlined in a talk before the Kiwanis Club at its weekly luncheon, by C. A. Reed, nut culturist of the Bureau of Plant Industry, U. S. Department of Agriculture, who was the guest of Kiwanian J. M. Patterson, says the Albany, Ga., Herald, April 29th. Dr. E. A. Landau, chairman of the Kiwanis entertainment committee, had placed Mr. Patterson on the program for a talk on the pecan industry, but Mr. Patterson made only a few preliminary remarks and presented Mr. Reed. Mr. Patterson declared that "fifteen years ago the pecan industry was a hope; seven years ago, a faith; today it is a reality."

Mr. Reed admitted that when he was first assigned to pecan work he knew nothing about it; in fact had never seen a pecan tree. But in the fourteen years of his experience he has seen the industry mount from a few seedling orchards to the great development in papershell groves found in the Albany district. He declared that the pecan industry has been more highly developed in the Albany district than anywhere else in the world—not because the climate or the soil here is better adapted, for the pecan tree is not even a native to this section—but because the Albany district had a J. M. Patterson.

Pecans a Balanced Food

Pecans as food were discussed by Mr. Reed, who declared that nuts are the only product furnishing a complete food in their raw state, and that papershell pecans are the princes of nuts. He said that the pecan is admirably suited to growth in the belt between the peach and apple belts on the north and the citrus belts on the south. It is a comparatively new nut, he said, much less than a century old and planted commercially for the first time less than twenty-five years ago. It is now the best nut in the world and brings the best prices.

Some growers have expected too much of the pecan, Mr. Reed declared, thinking it could be grown with no drawbacks, such as other crops have. He spoke of the inferior quality of nuts from many groves last year, due to the dry weather. He said these partially filled nuts, and some of them not filled at all, had hurt the industry, but the most of the growers were honorable men and made adjustments. He urged that it is of vital importance that nothing but good nuts be put on the market, unless they are shelled and the buyer can see exactly what he is getting.

No Tariff Is Needed

Mr. Reed spoke of the action of the National Nut Growers' Association in trying to get a tariff on pecans to exclude the inferior Mexican pecan, which they thought was cheapening pecans in the estimation of the public. He said that he believed the growers lost nothing by failing to secure a tariff, as the Mexican pecan claims to be nothing but a cheap pecan; that the growers can protect the papershell pecan industry by raising and selling nothing but good ones; by keeping inferior papershell ones off the market. He urged the Kiwanis Club, as an organization composed of representative men, to lend their influence to encourage this condition.

If you happen down to the right dock in New York when the right ship from Rio comes in you may see them unloading the new crop of Brazil nuts. That you can get five pounds of these for \$1 is due principally to the fact that they commonly come to New York as ballast. Small quantities come in other ways but this bulk handling is the rule for big shipments. At this end of the voyage they are packed in bags down at the docks. There is no better way of shipping them say the dealers. The shells are very strong and heavy and the more they can be exposed to the air the better for the quality when the nuts reach market. The white, oily meats are only the seeds of the big round fruits. They resemble coconuts and hold about 18 to 25 of these big seeds. When ripe they will fall to the ground. Then they are dried and husked by natives and shoveled into the hold of a ship.

American Nut Journal

COVERING NUT CULTURE

NORTH—SOUTH—EAST—WEST

AMERICAN FRUITS PUBLISHING CO., INC.
50 State Street - Rochester, N. Y.

RALPH T. OLCOTT, Editor and Manager

Official Journal Northern Nut Growers' Assn
Official Journal National Nut Growers' Assn

SUBSCRIPTION RATES

One Year, in advance.....\$2.00
Canada and Abroad..... 2.50
Single Copy20

ADVERTISING RATE

Per column inch.....\$2.80
Forms Close 10th of each month

ROCHESTER N. Y., MAY, 1922

NUT ASSOCIATIONS

California Almond Growers' Exchange—President, G. W. Pierce; manager, T. C. Tucker, 311 California St., San Francisco.

California Walnut Growers' Association—President, C. C. Teague; secretary, W. T. Webber; manager, C. Thorpe, 1326 East Seventh St., Los Angeles, Cal.

Georgia-Florida Pecan Growers Association—President, J. M. Patterson, Putney, Ga.; vice-pres., A. C. Snedeker, Blackshear, Ga.; sec'y-treas., J. S. Wight, Cairo, Ga. 1922 meeting, Thomasville, Ga.

National Nut Growers Association—Prest., Charles A. Simpson, Monticello, Fla.; vice-pres., J. M. Patterson, Putney, Ga. and E. C. Butterfield, Winona, Tex.; secy., J. Lloyd Abbot, Spring Hill, Ala.; treas., J. Slater Wight, Cairo, Ga. 1922 meeting, Thomasville, Ga., Oct. 4-6, 1922.

National Pecan Growers' Exchange—President and manager, William P. Bullard, Albany, Ga.; vice-pres., J. B. Wight; secy-treas., A. D. Galt.

Northern Nut Growers' Association—President, James S. McGlennon, Rochester, N. Y.; vice-pres., J. F. Jones, Lancaster, Pa.; treas., Willard G. Bixby, 32 Grand Ave., Baldwin, N. Y.; secy., Dr. W. C. Deming, Georgetown, Conn. 1922 meeting, Rochester, N. Y., Sept. 7-8.

Texas Pecan Growers' Association—President, J. H. White, Mason; vice-pres., William Capps, Fort Worth; secy., J. H. Burkett, Austin, Tex.; exec. com., J. H. Burkett, Austin; Prof. Will H. Mays, Austin; Prof. A. Caswell Ellis, Austin.

Western Nut Growers' Association—President, Ferd Groner, Hillsboro, Ore.; secy-treas., C. E. Schuster, Corvallis, Ore.

"CAN'T AFFORD THEM"

A Sheridan, Ind., news item says: "One of the few remaining if not the last one of the big walnut trees of this community was cut last week on the old John Puckett farm, northwest of Sheridan. The tree was 36 inches on the stump and will go to a veneer works at Indianapolis. Years ago black walnut grew here in great quantities, but it became so valuable that farm owners could not afford to keep the trees."

Well; what is being done to provide more black walnut trees which become so valuable "farmers cannot afford to keep them?" Strange that farmers and others choose to plant maples, elms and other fruitless trees which they can "afford to keep!"

Nuts From China

Martinsville, Ind., May 4—Omer R. Abraham, of R. R. No. 1, who is doing considerable work in nut propagation, has a shipment of nuts on the way from China. Mr. Abraham forwarded seed black walnuts to Mr. Wang, of China, who is connected with the government there, for experimental purposes, and Mr. Wang is forwarding Mr. Abraham some of the Chinese nuts for experimental purposes in the U. S.

The steamship Justine arrived in port recently from Brazilian ports with a cargo of 31,571 hectos of Brazil nuts.

INDEBTEDNESS TO THE EXPERTS

How greatly the American Nut Industry is indebted to its experts of the pioneer days will sometime be appreciated with full force. This journal has repeatedly referred to this subject. Almost daily there are new evidences of this great indebtedness.

Take, for instance, the article on "Improved Methods in Propagating Pecans," by H. A. Halbert, Coleman, Texas. Aside from the marked success with which he has overcome obstacles which have baffled for long time the efforts of the majority of others, thus adding greatly to the development of the industry, there is a fascination about his methods which instantly arrests the attention of the reader. While others have taken pains to cut dormant buds in early spring and with difficulty have kept them for use in sap-rising time, attaining then only a measure of success, he has learned to go to any pecan tree and find dormant buds ready for use any month in the year and in far better condition than they can be preserved, severed from the tree! That information is simply, modestly stated by Mr. Halbert, yet it revolutionizes dormant bud practice. Listen:

"In the prodigality of Nature that perpetuates species, she has placed four buds in the hollow of every leaf stem of the pecan tree each awaiting its turn to spring into life should its predecessor fall from any cause. Then all you have to do after the sap rises and the primary bud begins to swell, is to cut the primary bud off with a sharp knife and use the secondary bud which is still dormant; and so on until all four of the buds are used."

There's team work! It's almost an uncanny co-operation with Nature.

Now here's a little trick for gaining a whole year's time in bringing a top-worked tree into bearing. Indeed, for bringing a topworked tree into bearing the next year after the buds have been put on! This genius of the Southwest forces dormant buds into life by using two separate stands of raffia or waxed cloth in tying the buds, and cutting these at different times, accommodating Nature's delivery of sap food.

While others are discussing the length of the tap root, the advisability of preserving it in transplanting and the great difficulty in doing so, Mr. Halbert simply grows the tap root in a long cylinder of narrow diameter and lifts the whole thing, undisturbed and still growing, for transplanting!

We have published several articles by Mr. Halbert on cultural topics, notably his practical observations on pollenizing, which have attracted much attention. We take off our hat repeatedly to him. He first planted pecan nuts forty-two years ago. Think of it! The commercial pecan industry is only half that old.

Other experts have devised methods of great interest and value, too. The method for preserving summer buds in transit, devised by F. T. Ramsey, Austin, Texas, quoted by Mr. Halbert, shows the result of long experience and patient revision of practice time and again.

Oakland, Cal., May 3—The National Nut Company of California, an affiliation of a large Seattle industry engaged in importing and merchandizing nut products generally, has been authorized to issue \$250,000 8 per cent cumulative preferred stock and \$500,000 common, to establish a factory and warehouse in the Eastbay region. The directors of the Company are Charles E. Dodge, John Nissen and A. F. Lees, and Anton Delkin of Seattle. Delkin founded the parent "nut house" in Seattle some 29 years ago.

Just mention AMERICAN NUT JOURNAL.

Association Member Suggests

Editor American Nut Journal:

I think W. A. Thomas, Lincoln, Neb., in January issue of this journal has struck the right idea when he states we are not progressing and that he will lose all interest in the nut business if we should only "plant the species that belong to that locality," as Prof. Chittenden states.

Why does not the Northern Nut Growers Association give us a foundation on which we can base our hopes and aspirations? For instance: The chestnut seems to be a hardy tree, and apparently a good bearer and money maker, according to all the data we have gathered at the present time. Then why not let us plant chestnut orchards here in the middle West as a good working basis, and just experiment with the other kind of nut trees for the present, and experiment it is with most of the other kinds of nuts. Personally, I do not think the English walnuts would be a success at all in Nebraska, owing to the severe winters there, but there are, no doubt, several nut trees such as Japan walnut and chestnut which would be a success there. Let us hear from some of the Northern nut growers on this.

Mr. Thomas states that he has been a subscriber to this publication for forty-eight months and says he has not in all that time received any information that is reliable or of any real value in furthering his ambitions in the line of nut culture. And apparently he is right, for most of the information we have received up to the present time has been very unsatisfactory and unreliable. So let us get busy. At least, give us something to work on, so that we can go ahead with our ambitions in this line—something that we can base our hopes and faith on that will pay us for efforts and energy that will be directed along this line.

I am not at all interested in the kind of nuts which are native here, and do not see any money in their culture—so if we cannot go any further than raise native nut trees, I do not see where we have progressed any in the task we have undertaken.

CHAS. O. HENNINGER.

707 Terrace Ave., Indianapolis.

Nut Tree Experience in Kansas

Editor American Nut Journal:

I was very much interested in Mr. W. A. Thomas' timely inquiry in a recent issue of the Journal. Like him, I am anxious to know what kind of nuts will grow here. I am about 150 miles due south from Lincoln Nebraska. The pecan grows wild about fifty miles south of here, and the same distance southeast. There is one tree growing here, a seedling, probably 35 years old, 30 feet high; it bears light crops. There is one American chestnut probably planted forty years ago. It is 25 feet high and eight inches in diameter. It has never filled its burs, probably on account of lack of pollinization. I have a Paragon chestnut, planted forty years ago which bears burs every year, but the latter did not fill until I grafted another variety in the top. When the graft blooms the Paragon burs fill. This tree is only about ten feet high.

I have planted about twenty varieties of English walnuts most of which are dead. They will not stand our dry air; neither will the heart nut nor the foreign hazel, although the hazel grows wild here. I have planted all the varieties of northern pecans. It seems to take three or four years for them to get started after transplanting, but when they do start they grow well on good land.

I plant every kind of nut tree that I think

will grow here, but have made some failures. I have six varieties of black walnut growing. I have tried to graft on our native hickory, but only have one pecan growing, a Posey, and one hybrid hickory. They start all right the first year; then die. Our native hickory is the same, I think, as W. A. Thomas has at Lincoln, Neb. Instead of its being a pig nut, I think it is a bitternut. The tree has smooth bark and yellow buds in winter; the nut is very bitter. I propose to try grafting the Beaver shagbark on our native bitter hickory.

I note what Mr. H. A. Halbert says of the pecan tap root. I have never seen a tree that reformed a tap root which had been cut off; generally one to four tap roots take its place. Although the tree may have made but an inch or so of growth, on top, the new tap roots will be a foot long and straight down from where the original tap root was cut. This is true of all natural tap-rooted trees. Cutting the leader out of the top of a tree will cause side roots to form as well as side branches on the top; in fact, the root system of a tree is usually similar to the top growth, and wherever there is a large branch of a tree, a large root will be on the same side of the tree. J. F. Jones, Nurseryman, Lancaster, Pa., prunes his trees in Nursery, I judge by running a tree digger when the seedlings are small, and still you will find tap roots on his trees that he sends out to his customers. The only difference is that sometimes there are two or three instead of one.

JAMES SHARPE,

Vice-Pres. State Horticultural Society.
Council Grove, Kansas.

Nut Exhibit By A. P. S.

Editor American Nut Journal:

The article in your issue of March by Mr. Bixby concerning Mr. Riehl and his work with chestnuts in which he made reference to the Wilder Medal awarded to him by the American Pomological Society may perhaps call for a fuller explanation of this phase of the work of that Society.

The Honorable Marshall P. Wilder, for a long time president of the Society, left certain funds, the interest from which was to be used for medals to be awarded for conspicuous and meritorious services to pomology. These medals have been given for work of general worth and importance as for instance the one to Dr. L. H. Bailey and for the introduction of new varieties of value. A number of these have been awarded by the society and they are held in high esteem by the recipients.

At the Toledo, Ohio, meeting at which the exhibit of Mr. Riehl was deemed worthy of such distinction, there were also exhibits from the experiment stations of Georgia and Alabama. These were given awards of merit. A more favorable pecan season would have brought out many more.

The next convention of the American Pomological Society will be held November 15-17 at Council Bluffs, Iowa, in conjunction with the Mid-West Horticultural Exposition. One of the chief interests of the society is in the development of both the fruit and nut industries through the development of new kinds that are better than existing ones. The society hopes that the growers of the country will desire to show the results of their nut breeding and culture, either through collections or single excellent sorts.

Many nut growers are members of the American Pomological Society and will learn of the plans for the exhibit in connection with the meeting but I will be glad

Improved Methods in Propagating Pecans

Nothing has been studied more closely than the pecan tree, both root and branch, since I planted my first pecan nuts forty-two years ago this winter. In a liberal spirit I always have been as free to give the public any advanced ideas as the press has been to publish them. In this same spirit to help promote the most important undeveloped industry in Texas I am submitting for publication a few new discoveries I have practiced in recent years and find of great advantage.

FIRST, DORMANT BUDS. It is useless to cut dormant buds in early spring and try to keep them until the sap rises to be used. They are difficult to keep and of small value for use. You can go to any pecan tree and find dormant buds ready for use any month in the year and in far better condition than they can be preserved, severed from the tree. In the prodigality of nature that perpetuates species, she has placed four buds in the hollow of every leaf stem of the pecan tree, each awaiting its turn to spring into life, should its predecessor fail from any cause. Then all you have to do after the sap rises and the primary bud begins to swell, is to cut the primary bud off with a sharp knife and use the secondary bud which is still dormant, and so on until all four of the buds are used.

SECOND, FORCING OUT BUDS. I find that I can force these dormant buds to spring into life after they have been put upon the stock by using two separate strands of raffia or waxed cloth in tying the buds on. Use one above the bud and the other below it in tying. Then as soon as the bud bark is knitted to the stock within some five or six days, cut the upper strand. This allows the sap to flow freely into the bark bud down to the bud. The lower strand checks its flow and holds the food the sap contains around the bud, which causes it to spring into life at once. After the bud gets well started into growth, cut the lower strand. In this way you can bring top-worked trees into bearing a year earlier or the next year after the buds have been put on.

THIRD, TO KEEP BUDS FRESH IN TRANSIT. This is a very important process, and I find if the buds are trimmed immediately after being severed from the tree and wrapped in thick paraffin paper so as to exclude all air and water, then place damp moss or paper around the waxed paper, then wrap several folds of dry paper or porous cloth around this damp paper, they will keep indefinitely. I had some put on after they were wrapped in this way for ten days, and nineteen out of twenty went to growing. Do not use waxed paper, oil cloth or any material that is impervious to air on the outside of this damp material. If you do the evaporated water will make steam in the hot summer months and scald your buds. I am indebted to my friend, F. T. Ramsey, Austin, for this new idea of preserving summer buds.

FOURTH, PRESERVING THE TAP ROOT. I thought of a plan to preserve the tap root intact when transplanting the pecan tree. I gave my ideas to several. One friend thought enough of my plan to have it patented in his own name. It is this: Plant your

to keep you informed concerning it so that all your readers may know.

R. B. CRUICKSHANK.

Cultural Topics

nuts in a long cylinder of narrow diameter made of some cheap material, as oil card board, sheet iron, etc. Fill these with dirt and either dig a ditch and put them in the ground, or set them over ground in a box and plant a nut in each one. The resultant tree can be shipped with container and all, and transplanted winter or summer without any detriment or destruction of the tap root. The cylinder can be removed as the tree is transplanted, and if carefully done the tree will never wilt even in the summer time.

H. A. HALBERT.

Coleman, Texas.

J. D. Jowers, pecan specialist, A. and M. College, has been budding pecan trees near Cuero, Texas.

Transplanting Walnut Trees

There has been a persistent notion that nut trees are hard to transplant. Therefore, I will give my method which I use on land, the roughest and rockiest possible with the timber cleared off, where young native walnut trees are growing all around, four to six inches away from the root and pull them up. This is easily done with young taproot trees in November when the ground is well soaked. As fast as they are taken out, I place them in a wet sack. When I have a dozen or so, I plant them in an open space. With the crowbar I ream a hole in the ground corresponding to the length of the tap root. Insert the tree and push down the rootlets with the narrow blunt end of a slat. Press the ground at surface against tree to hold it in place. Then six inches from tree, I push the bar down slanting outward at top. When nearly as deep as tap root, the soil is pushed up to root, tight as possible in three or four places around the tree. Then the blunt end of the bar is used to fill up all the holes made by the bar.

The bar I used is made of one inch piping, five feet long. In one end is pushed a foot piece of steel, six inches in, six inches out, and welded, then forged to a round point. The other end is filled with a hard wood cap, two and one-half inches in diameter with six inch stem to fit in pipe. This is used for rammer.

Larger trees three quarters of an inch to one and one-half inches with long side roots, I plant as follows:

Where the tree is to stand, draw a straight line eighteen inches each way from center. On this line you dig down on one side only leaving a straight wall on the other; the hole on the side has a concave form like the mouth of a coal scuttle. The wall will have a face like a half circle. Examine the tree and select two opposite sides that have the least side roots. Cut them close to tap root; wax if large. If tap root extends beyond side roots, punch a hole in center close to wall. Put root in and tamp hard. Fasten tree against wall with iron or wooden hook to keep it in place. Take all the longer side roots and tie them loosely against the body of the tree. Hang a wet sack over them in hot weather. Now, take the lower side roots and spread them out fan-shape against the wall; push soil against them to hold them in place. Then shovel in soil up to the next set of side roots. Take crowbar and ram soil hard against the wall all the way, keeping a few inches of soil between rammer and roots. Pull down another set of side roots and spread them and proceed

(Continued on page 64)

The American Nut Trade: Market and Crop Reports

THE PECAN

San Antonio Pecan Campaign

Pursuant to the efforts of L. E. Wolfe, former superintendent of city schools, O. L. Wallace of the State Agricultural Department and City Attorney T. H. Ridgeway have agreed to bud the two-year-old pecan trees planted under previous campaigns directed by Mr. Wolfe. Persons who have these little pecan trees may avail themselves of the free services of these two experts by communicating with the principal of the school in their community.

"As is generally known," said Mr. Wolfe, "a tree from a large thin-shell pecan, unless it is budded, may not bear for a dozen years, and then only small thick-shell pecans. Therefore it is very necessary that these seedling pecan trees (from the nuts we have planted) be budded when two years old. I am making an effort to get all these little pecan trees budded during the next month and a half."

"In promoting this campaign to put pecan trees in all back yards, and later on the streets, replacing the hackberry trees and using them for fire wood, we encounter a great deal of indifference. Although 15,000 industrial home project circulars have been sent to the patrons of every English speaking home, stating that the schools would be supplied with seed pecans for free distribution, we have experienced great difficulty in enlisting the co-operation of the homes, and sufficient permanent co-operation of the larger pupils to water and otherwise properly care for the planted pecans."

"Two years ago, in connection with other industrial home projects, I inaugurated a campaign to get pecan trees planted in every San Antonio back yard. The seed pecans have been donated by Albert Steves, Sr., and Dr. F. L. Thompson. The pecans have been soaked for a few days in water and sprouted in sand boxes at the public school buildings, wrapped in wet rag or paper, and taken home by pupils to be promptly planted in previously prepared holes—sharp end up, 4 inches deep, preferably with some sand immediately surrounding the pecan. Pecans in the back yards should be planted at least 15 feet apart. It is not objectionable for fig trees to be midway between pecan trees, which latter will later be high above the former."

Pecan Company Organization

The San Saba, Texas, Pecan Company has been organized with the following officers: G. A. Arhelger, president; E. H. Morris, vice-president; W. C. Dofflemeyer, treasurer; A. W. Woodruff, secretary; R. R. Low, chairman of the executive committee; Walters & Baker, counsel; E. B. Newman, director of sales and distribution. This company is organized for the purpose of growing, buying, selling and marketing pecans and for the manufacture and marketing of pecan products.

The Albany, Ga., Herald, April 19th, said: "Mr. J. S. McGlennon, of Rochester, N. Y., arrived in the city this morning on one of his periodical visits to the extensive pecan interests which he has in the Albany district. Mr. McGlennon has been interested in the pecan industry in this section for several years and is one of its most intelligent and consistent boosters. His friends in and around Albany are always glad to see him."

Approximately half of the twenty-five thousand dollars which the agricultural appropriation bill allots to the Bureau of Plant Industry for the study of nut culture will be used in experimentation with pecans, and a large part of the research work will be conducted in Georgia.

According to early reports of some of the pecan growers of the Guadalupe Valley, in Texas, the pecan crop for this year will be rather short, as many of the trees have no blooms at all while some only have blooms on the protected side of the tree.

The Nation Studies the Pecan

It is interesting to learn that approximately half of the twenty-five thousand dollars which the agricultural appropriation bill allots to the bureau of plant industry for the study of nut culture will be used in experimentation with pecans, and that a large part of the research work will be conducted in Georgia. Thanks to the insistence of Senator Harris the sum first allowed for this useful enterprise was substantially increased.

Particularly welcome will be the experiments with the pecan. Within little more than a decade Georgia's production of this delectable and nutritious nut has increased from some three hundred and sixty thousand pounds to upwards of three million; and when it is reflected that the better grades bring from forty cents to a dollar a pound, the importance of this growth is apparent. In Georgia, authorities say, occurs the ideal combination of soil and climate for pecan culture, so that this industry is certain to become a prime factor in the commonwealth's prosperity. Now that the subject is to receive especial attention from the federal department of agriculture, developments may be expected to move with quickened pace.—Atlantic Constitution Editorial.

Pecan Kernel Spot Disease

Steps have been taken by the United States Department of Agriculture to aid pecan growers who have suffered severe losses during the past season because of the unusual outbreak of pecan kernel spot disease. The very finest varieties of pecans have been attacked particularly the Schley, and many splendid groves, bearing well, have shown severe losses at harvest because of the disease. This condition has greatly interfered with the marketing of the finest pecans just as they were coming into bearing.

Several growers who could not fill all their orders for the best varieties found themselves at the critical time with kernel-spotted nuts on hand, which had to be cracked in order to be graded. The market for the cracked nuts or pecan meats is less desirable than that for high grade, large, full paper-shells nuts in their natural state.

The results of the studies made by department specialists in connection with this kernel disease are shortly to appear in the form of a bulletin.

The Roth-DeWitt Pecan

The handsome pecan tree on the Roth place in the Concrete section between Cuero and Yoakum, Texas, for which the owner received an offer of \$1,000 on one of the Cuero trades days last fall, the tree to stay where it is, has been classified by A. and M. College pecan experts as a native of the county, and given the name of Roth-DeWitt.

The rivers in Zavalla county in Southern Texas are lined with stately forests of fine pecans and the yield is enormous. Col. Ike T. Pryor owns the largest pecan orchard. C. C. Busby of LaPryor says he gathered 240,000 pounds from this orchard in 1921, and sold them at an average of 12 cents a pound which netted \$28,800. This forest is located on the Nueces River near the center of the county and the pecans were shipped from La Pryor, and were seven big car loads.

Says W. B. Lamar, a Thomasville, Ga., paper shell pecan grower, writing in the Monticello News: "We won't begin to supply the market (with proper distribution) in the United States in twenty-five years." Granted. Then the moral is: Plant more pecan trees in Florida, where they thrive and produce so wonderfully well.—Jacksonville Times-Union.

Five varieties of pecans are being distributed throughout China at cost price by the College of Agriculture and Forestry, University of Nanking.

Just mention AMERICAN NUT JOURNAL.

Pecan Wizard

To have the word "wizard" connected with one's name may sound good to most people, but somehow I can't quite enjoy it. The way it got started in my case was after a visit by the late Professor T. V. Munson, when he gave my pecan work a little write up. And this is just about the way the word wizard got tacked to the name of our great plant breeder, Burbank. That he never assumed it himself, I know; he has too much sense for that.

I have been looking through the dictionaries and encyclopedias to see what they have to say about wizards and witches. No good can I find, but that there are six of one and half a dozen of the other, any one can see for himself; anyway there is no honor in being called a wizard, not even an imperial wizard; in fact there is no such thing as a wizard or a witch, although there are now and always have been people who believe there are. For the first of their work we are familiar with, see in the Bible, Samuel I, 28, where Saul sought the witch of Endor to talk with the dead Samuel; but in Deut. xviii wizards are pronounced an abomination to the Lord. History goes on telling of thousands of witches and wizards being executed, the last in Salem, Mass., United States. We would do well to keep in mind the words of our late President Roosevelt when he said: "The greatest need of the day is more common sense, more honest and more courage."

E. E. RISIEN.

J. L. Bonner, Oak Hill, Ala., this spring cultivated for more pecan production. He already has 2500 Stuart, Russell, Pabst and Van Deman pecan trees, from 10 to 20 years old. He also has 1500 seedling pecan trees, 15 to 25 years old.

T. S. McManus, Waldo, Fla., writes that weather has been exceptionally dry in his section of the state, but with changed conditions his pecan trees have put on a fine crop.

County Agent C. L. Beason and Professors Hayes and Bryson of the A. and M. college this spring grafted a considerable number of native pecan trees in Brazos county, Texas.

A pecan grove of the paper shell variety in this section of Texas is more profitable than an orange grove in California, is the opinion of J. D. Jowers, pecan specialist, speaking at Cuero, Tex., recently.

The city hall park of Mt. Vernon, Ind., was decorated last month by the planting of ten pecan trees and two chestnut trees, the gift of Thomas J. Erwin, of Mt. Vernon.

IT COSTS LESS THAN 17 CENTS A MONTH TO KEEP IN TOUCH WITH THE TRADE THROUGH A REAL NURSERY TRADE JOURNAL.

A NEW BOOK! NUT GROWING

By Robert T. Morris

The latest and only up to date book on the newest and one of the most important branches of Horticulture, giving a broad survey of a rapidly growing industry. Detailed explanation of successful methods of propagation and the new process of grafting with the use of paraffin; illustrated.

An invaluable work for all nut growers.

Price. \$2.65, Postpaid

AMERICAN FRUITS PUB'G. COMPANY
39 State Street, Rochester, N. Y.

THE FILBERT

The Filbert In The Northwest

By Percy Brothers, Salem, Ore.

The filbert is the European cousin of our hazel nut, the only nut native to the Pacific Northwest.

The filbert can never be grown commercially in any section of the United States other than in certain favored sections of the three states bordering on the Pacific.

There is probably more land in the Willamette valley suited to filbert culture than in all the rest of this country and it is here that the Great American filbert industry is centering. For twenty-five years filbert trees have produced crops in this section and we have commercial orchards fifteen years old so it is to be seen that, although the present bearing acreage is small, the industry is nevertheless, beyond the experimental or pioneering stage.

A good market for all the nuts which can be grown here is assured. The United States consumes annually 20,000,000 pounds of foreign grown filberts. This consumption has been reached without any organized effort to push the sales of the product. Our locally grown filbert is greatly superior in quality to the foreign stuff that we find on our markets and when the tonnage gets to be sufficient so that modern methods of marketing and advertising can be utilized it is reasonable to suppose that the tonnage consumed by the public will be greatly increased.

Of all the orchards crops that grow so well in our favored climate no other is so well adapted to the peculiarities of our Mistland weather as is the filbert. Untimely rains may appear at blossom time of other fruits and, by keeping the insects from pollinizing the blossoms may materially reduce the amount of crop. The filbert, blossoming from January to March, relies upon the wind as an agency of transport of its pollen and so does not recognize the rain as a determining factor in setting its fruits. Neither will rains at harvest time play havoc with this "made to order for Oregon climate" crop as they sometimes do with other successful but less favored crops, such as the cherry or prune.

A frost of an intensity that will kill the blossoms of an ordinary tree crop will pass unnoticed by the filbert. Hence we can utilize lands for its culture that are unsafe for growing other horticultural products.

The filbert will do well on a wide range of soils. It requires no more spraying than does the cherry and is as easily pruned as is the prune. Its crop is easily and cheaply harvested and no expensive equipment is needed for its handling.

The crop is picked up from the ground after it drops from the husks, being very easily and cheaply harvested. It is not an easily perishable crop. The trees bear at an early age, producing large crops of a high-priced product. Where every condition is ideal the filbert will bear commercially the fifth year and will increase in yields for a good many years thereafter.

There is a thirty-two year old filbert tree in Portland which has produced 150 pounds or nuts in a single year.

A five year old tree at Eugene produced 16 pounds and an eight year old at Woodburn produced 35 pounds.

An eleven year old planting at Wilsonville, the Kruse orchard, produced at the rate of 3,000 pounds per acre.

A Salem planting produced two tons on two acres when the trees were ten years old.

Geo. Dorris, the veteran grower at Springfield, made the statement at a meeting of the Western Walnut Growers Association, that from an acre of number one Barcelonas, where every condition was ideal, the yield should be as follows:

At five years... 500 to 1000 pounds per acre
At six years... 1000 to 1500 pounds per acre
At eight years... 2000 to 3000 pounds per acre
At twelve years... 4000 to 5000 pounds per acre

What crop can equal this in the way of returns if we should harvest only half of what Dorris states is possible?

The pre-war price on filberts was 16 to 20 cents per pound. During the war the grower received as high as 35 cents. It is unlikely that the price will drop below 20 cents

EXPERT PECAN INFORMATION

For a limited period the membership dues in the National Nut Growers' Association have been reduced from \$4 to \$2; or a membership in connection with one year's subscription to the American Nut Journal for \$3.25.

Those paying their dues have the privilege of the floor at the annual meetings and will also receive a free copy of the printed proceedings of the annual meeting. These proceedings include all the papers read at the convention, as well as a stenographic report of the discussions of the papers.

If you want to learn the secret of how to produce the most nuts from your pecan trees, then read the last proceedings of the Mobile convention, as Dr. J. J. Skinner in his paper "The soil fertility and fertilizer problems in pecan culture," divulges secrets that are worth thousands of dollars to you. Other important papers appearing in the Mobile Proceedings are:

Future of pecans.
Nut culture on the Gulf coast.
Pecan culture in Alabama.
The Southern farm journal's interest in pecan culture.
Build a pecan orchard.
Budding and grafting.
Varietal discussions in pollinization.
Requisites of successful pecan growing.

Pecan insects.
Pecan scab.
Has rosette been conquered?

Papers on all the above subjects are by men of high standing in the pecan industry and those who know their subject thoroughly by experience.

Send your subscription today to the Secretary, J. Lloyd Abbot, Route No. 1, Spring Hill, Ala.

at any time, now that we have big growers co-operative organizations looking after the marketing of the fruit and nut crops.

The Hazel Nut in Turkey

The most important nut crop of Anatolia, or Asiatic Turkey, is the hazelnut. The chief producing areas are the Trebizond, Kerassunde, and Ordou districts, the variety grown in each taking its name from the district. Kerassunde and Ordou nuts are considered the best, being rounder and larger and containing more oil than the Trebizond variety. The number of trees in Anatolia in 1914 is estimated by the Turkish Ministry of Commerce and Agriculture at 5,212,000, but the number has been materially reduced, as in the case of other fruit-bearing trees, owing to the continued state of warfare existing there.

Harvesting generally begins during the latter week in August and continues through November. The green nuts bring 30 to 40 per cent less than the dried. The foreign demand for unshelled hazelnuts is light, although a small amount of the unshelled Trebizond variety is shipped each year to the United States, France, Egypt and Rumania.

The port of Trebizond is the chief exporting center for hazelnuts in normal times, small quantities passing through Kerassunde, Ordou, and Ineboli. Since conditions have been so unsettled, however, the larger part of the crop has been sent to Constantinople to be sorted, packed and shipped.

England, the United States, Germany, France, and Italy are the principal purchasers of Anatolian hazelnuts, although a large part of the supplies taken by Germany and Italy is trans-shipped to Scandinavian and Swiss markets. Exports of filberts to the

United States from Turkey were valued at \$250,000 in 1911, \$227,000 in 1912, and \$167,000 in 1913. Shipments to the United States in 1919 were very small, the exact amount not being known. In 1920 the value of hazelnuts exported from Constantinople to American markets was \$59,000, and during the first nine months of 1921, according to the best information that can be obtained, shipments were 232,000 pounds, valued at \$23,000. No figures are available of the exports to the United States, if any, from Trebizond and other Black Sea ports during 1920 and 1921.

American Filbert's Developments

The editor of the Oregon Grower says: While making our trip through the big jobbing centers of the country we sounded the trade out on their opinion of Western filberts. They had never seen many, but what few they had seen, had made a very good impression. Filberts are imported from Spain, Sicily and Italy. The long type of nut commonly known in the markets as the Long Naples, is held in the highest esteem by the trade. The nut has considerably the appearance of our Du Chilly, and it brings more money on the market than the round type.

The Round Spanish is a favorite, and the Sicily is well known. The European Barcelona is not liked as well as the long type, such as the Long Naples. None of the filberts I saw in the east with only one or two exceptions, were equal to the filberts we produce here. They are often sent over from Italy, ungraded, long and round types mixed together, many blanks or empty shells, large and small nuts put into the same basket or bag.

As soon as we can begin to send filberts east in carload lots, can have a high cracking test, and have good grade as regards color, size and variety, we are going to find a ready market at a very satisfactory price. In the finer stores of New York and Chicago, the best graded filberts were retailing at 60 cents a pound. We all agree this is too high to give a heavy consumption, but is indicative of the esteem in which the nut is held, when it is properly grown and well marketed.

There are thousands of acres of land here in Oregon especially adapted for the filbert. It looks to be one of our coming crops. There were parties this winter who asked us if we could not guarantee them at least half a car, if we could not give them a full car of filberts this coming season. It will be quite a number of years before we can get solid carloads to offer to the trade.

THE ALMOND

Average Almond Prices

The California Almond Growers' Exchange, in settling with its growers for their crops of 1919, 1920 and 1921 paid growers on the following basis:

Cents per Pound:			
	1919	1920	1921
Nonparel	26	18½	18
I. X. L's	24	18½	17
Ne Plus Ultras	21	16½	16
Drakes	14	9	9

The fate of the California Almond Growers' Exchange will be decided May 17. The board of directors of the exchange on that date will total the almond acreage of the state pledged to market crops co-operatively under the five-year contract offered to almond growers as the nucleus of a reorganization necessary to avoid liquidation.

It is proposed that the California Almond Growers Exchange shall not become the purchaser of crops of those who are not members. Heretofore, growers have been able, at the last moment, to deliver their crops to the Almond Growers' Exchange even though not members of it.

Oregon Legislation Asked

Secretary Henry E. Dosch, Oregon Horticultural Board, recommends that all walnuts offered for sale in Oregon be marked as to origin. The legislature will be asked to require that the label Manchurian walnuts be changed to Chinese walnuts.

Just mention AMERICAN NUT JOURNAL.

Just mention AMERICAN NUT JOURNAL.

PERSIAN WALNUT

Quick Market for Walnut Kernels

The walnut cracking season of the California Walnut growers Association closed on April 1st. At that date 90 per cent of the 1921-22 pack of walnut meats had been sold. The total output of walnut meats, packed in vacuum-sealed tins and glasses, approximated 2,500,000 pounds this season, as compared with 800,000 far last year.

The meats represent the handling of more than 8,000,000 pounds of walnuts during the packing season, which opened in November. Seven hundred women were employed at the plant of the association, 1745 East Seventh street, to assort and grade the walnut meats for packing.

"Until a few years ago, California walnuts were off the market before the warm days of summer," declared Sales Manager W. T. Webber. "The holiday demand usually absorbed the entire supply."

"Walnuts for salads and other uses during the summer were seldom to be had. The California walnut meats industry, which was inaugurated a few years ago, was designed to place vacuum-packed walnuts on the market to meet the later demand. However, this year, due largely to the small crop, practically the entire crop of packed walnut meats has also been sold."

To Tag Nut Trees In Groves

Walnut trees in the groves of California will be tagged and tabulated with the same accuracy as units of a manufacturing plant under the new system of enterprise cost accounting compiled by the University of California, College of Agriculture and the United States Department of Agriculture.

The association has just issued these farm management charts for the purpose of assisting its 4,000 grower members to check accurately the cost and productivity of each entire grove. The table provides detailed listings of income and expense items, records for the various production expenses, income tax tabulations and summaries for each month.

Experience indicates that badly frosted walnut trees may usually be saved by permitting a vigorous sprout to grow, and by remaking the tree from this sprout. There are many orchards which have been frosted back to the ground at least once, and some several times, and still the orchards have been brought out successfully.

Of 9,000 trees given by Ohio to the Cleveland parks this spring, 5,000 were black walnut.

Winter Injury to Walnut Trees

Early maturity in young walnut trees can be promoted and injury from frost avoided by withholding irrigation water in late summer, states L. D. Batchelor, Professor of Orchard Management in the University of California. In his circular entitled "Winter Injury in Walnut Trees" which has just been issued, Professor Batchelor furnishes timely information to walnut growers on methods of overcoming the effects of recent winter injury.

MEMBERSHIP DRIVE

National Nut Growers Association

\$2.00 Per Year—Limited Offer

By direction of the Executive Committee of the Association the Membership Fee has been reduced to \$2.00 for the limited period of the present Membership Drive.

REGULAR YEARLY RATES

Association Membership.....\$4.00
American Nut Journal..... 2.00

SPECIAL YEARLY RATES

Association Membership } \$3.25
American Nut Journal }

Address J. Lloyd Abbot, Sec'y.
Route 1, Spring Hill, Ala.

Thomson English Walnut Grove

Adelbert Thomson, East Avon, N. Y., owner of the Thomson English walnut grove which contains the parent trees of several varieties named by the U. S. Dept. Agr., said early this month that with favorable weather conditions he expects to have a crop.

Thirty English walnut trees and fifty pecan trees are included in a planting this spring of 3500 forest trees by Dr. S. B. Sims, Frankfort, Md. The pecans are of the northern variety; the walnuts are from the Pomeroy English Walnut Farms, Lockport, N. Y.

Plans to branch out with toasted and salted walnuts during the coming season will be formulated by the California Walnut Growers' Association upon information obtained by H. M. Kitchen, assistant sales manager of the association.

BLACK WALNUT

Black Walnut Trees Offered

A special opportunity is offered to plant black walnut trees. The Conservation Commission is advised by J. W. Calland, forester of the Miami Conservancy district, Clyde, O., that, owing to a change of plans in relation to flood prevention work in the Miami valley, he has 100,000 one-year-old black walnut trees that he can supply at practically the cost of digging, packing, boxing and hauling, \$1.20 per hundred in lots of 500 to 2,500 or \$1 per hundred in lots of more than 2,500.

Oregon Walnuts

Brokers and jobbers in the eastern states are reported as enthusiastic over the quality of the Oregon walnut, its size, white pellicle and fine flavor. Prof. C. D. Lewis said recently:

There are no nuts grown equal to the French strain, such as the Franquette and Mayette. Some jobbers recognized our nuts immediately, as the European or Grenoble nut, but said they were vastly superior to anything Europe sends over. They like the brown nut, and the fact that it has not been treated in any way, has not been bleached or had any artificial treatment, appeals to the trade.

There are thousands of acres of fine rolling hill land in western Oregon adapted to the English walnut, and it looks as though the future is bright. The greatest menace is possibly the Manchurian nut, but this in time, we believe, will be handled. The Manchurian crop was better handled this year than formerly. The nuts being graded, bleached, and made quite attractive. Unfortunately for California, their product this year was of very low grade, having more dark meats and inferior quality than is customary. Some people are forming a prejudice against the California product, unfortunately so, because no product should be entirely judged on one year's output. On the whole, the California crop, from year to year, is very high grade, and is well handled.

Frank Wallace, state entomologist of Indiana who recently returned from a trip through many states including California, said he found conditions all over the country apparently ideal for bumper crops in all fruits.

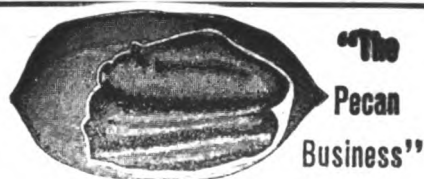
If it relates to nut culture it should be in the AMERICAN NUT JOURNAL. Please send it in.

Budded and Grafted
HARDY NORTHERN NUT TREES
Best varieties, grown in natural nut soil. Send for catalog. Have your seedling nut trees topworked to these fine varieties.
Information and estimate on request.
INDIANA NUT NURSERY
Rockport, J. F. Wilkinson, Prop. Indiana

HALES HICKORY
Grafts obtained direct from original tree, are on Northern pecan roots. Have pecan trees also.
SIMPSON NURSERY CO., MONTICELLO, FLA.

THIS SPACE
\$2.50 Per Month Under Yearly Contract
Including Publication in both AMERICAN NURSERYMAN and AMERICAN NUT JOURNAL
One Month: \$2.80 in both.

Texas Pecan Nursery
Arp, Texas
THE PEOPLE THAT GROW
WELL-ROOTED PECAN TREES



NEW EDITION FREE

A practical guide showing how to bud pecans. Tells how to grow trees 12 inches in diameter by the end of the 8th year, which yielded 400 lbs. nuts per acre.

Trees, Nuts, Groves for sale direct without agent at attractive reduced prices
B. W. STONE, Thomasville, Ga.

FOR SALE
SIX HUNDRED (600) ACRES PECAN ORCHARDS, SEVEN TO NINE YEARS OLD, ALL BEARING. SACRIFICIAL PRICE.
J. W. GILLESPIE, ALBANY, GA.

SUCCESS
and other leading varieties. Also citrus
BECHTEL PECAN NURSERIES
Ocean Springs, Miss.

PECAN TREES

Plant them this year! Buy direct from nursery and save agent's profit. All standard varieties; quality and service the best. Write us for prices.

FLORIDA NURSERIES
W. W. Bassett, Prop., Monticello Fla.

AMERICAN NUT JOURNAL

CHIEF EXPONENT OF
AMERICAN NUT INDUSTRY

Of National Circulation

Covering Every Phase of Nut Culture

Subscription: - - \$2.00 Per Year
Advertising: - - \$2.80 Per Inch

Official Journal { National Nut Growers Association
Northern Nut Growers Association

AMERICAN FRUITS PUBLISHING COMPANY

39 State Street, Rochester, N. Y.

Pecan Culture in Florida

(Continued from page 54)

It matures early in the season, but the best Money-makers you ever saw were but ordinary nuts. They are variable in size, without attractiveness in appearance, thick-shelled, and much of the time poorly filled. In the market it compares poorly with Schley, Alley, Pabst, or Stuart. Nevertheless, the Money-maker will withstand neglect, and perhaps, if abuse and neglect are necessary it is one of the surest of all varieties to give fair returns.

When perfect, the Success is one of the best varieties grown. It is large, attractive in appearance, thin-shelled, easy to crack, and when at their best the kernels are plump, of a rich brown color, and exceedingly pleasing in flavor and quality. There are two drawbacks to the Success; it tends to over-bear, and as a result to develop poorly-filled and even shrivelled kernels. The greater drawback, however, so far as Florida is concerned, is that, according to very recent reports, it is susceptible to pecan scab in this state. Mr. McManus of Waldo finds that it scabs, "almost as bad as Delmas."

Time forbids a detailed discussion of all varieties. However, there are four well-known sorts which merit mention for reason of their undesirability. These are Mobile, Nelson, Rome (syn. Columbia), and Teche. The first two and the last are extremely prolific; the first fairly thin-shelled, but after the first few crops most disappointing inside the shell. The Nelson is one of the largest of all varieties. It is also one of the thickest-shelled, but it is like the Mobile in its excessively high proportion of faulty kernels and nuts, the shells of which are wholly blank. The Teche is over-productive, small, of poor flavor, and often so poorly filled that they are not picked up from the ground.

The Rome of Columbia, as it is synonymously called, is one grand failure first to last, with few unimportant exceptions.

In conclusion, let me summarize briefly a few of the points touched upon in the foregoing and which are left here for your consideration.

Carefully select your varieties from those already known to the trade; do not have more than six at the outside, better not more than four. Buy from reliable nurserymen, not from agents, unless you know them to the core. Plant in your richest soil, preferably 60 x 60 feet each way. Use only budded trees or those which have been grafted a foot or more above ground. If troubled with winter injury, shade the trunks during spells of night-freezes, while the trees are under six years of age. Grow Schley, Alley, Pabst and Stuart when you can overcome climatic conditions. Add the Moore to this group as a variety you can harvest in some years before September 25th. For general planting, for the present stick to Bradley, Curtis, James, Moore and President. With the exception of the James these are all Florida varieties.

Walnut Growing in Arizona

J. J. Thornber, botanist of the University of Arizona, College of Agriculture, writes as follows to Secretary Deming of the Northern Nut Growers Association:

"Referring to your letter of some little time past, concerning the progress of walnut growing in Arizona particularly with reference to commercial development, I may say that in general the work is at a standstill. The several orchards that were set out in the vicinity of Tucson some years ago have mostly been dug out. This was not due in particular to the work having been proved a failure, but rather to the impromptu character of the work. Land was set out to walnut trees that was by no means ready. Instead of using good nursery seedling stock, wild stock was used which was dug up and handled poorly so that the trees either failed to grow or else made very poor growth. In a bulletin published in 1913 it was recommended that only nursery seedling stock be used and that these young trees be allowed to grow at least one year after being set out before they should be grafted. In the planting of the 7000 trees at Tucson, most of these trees were grafted the same year and practically none

of the grafts grew and in addition most of the trees died.

"With continued observation from year to year I am of the opinion now more than ever that walnut growing in southern Arizona will be practicable at altitudes of 3,000 or 3,500 feet and perhaps up to 5,000 feet. Below altitudes of 3,000 feet the extremely hot, dry weather in southern Arizona causes the leaves to scald occasionally and also the fruits to scald. Even where the fruits are not scalded, however, the very thin skin covering the meat is turned dark brown and frequently the meat has a rather oily taste. While such nuts can be used in the home, they have no place on the market and they cannot come in competition with superior products even with a considerable difference in price. There are occasional English walnut trees growing in southern Arizona whose leaves are apparently not injured with the heat and likewise whose fruits are not scalded. From such trees, we may develop ultimately a race of walnuts that will endure more than the usual amount of heat. Just as I understand there are races of English walnut and can endure without injury more than the usual cold.

"This leads me to ask if you have any information concerning varieties or races of English walnut trees that will endure zero degrees weather or several degrees below zero without injury. And if so, could you give me the address of parties having such trees for sale? I will greatly appreciate any information you may give me along this line.

To which Dr. Deming writes as follows: "I was glad to get your interesting letter about walnut growing in Arizona. I was certainly anxious to know about the orchard of 7,000 trees and regret that it has failed.

"Could you send me a copy of the bulletin you refer to as having been issued in 1913?

"I am afraid that I cannot tell you anything very definite about varieties or races of English walnut trees that will endure weather of several degrees below zero without injury. Most of the trees that I have seen in the East have shown injury that I have ascribed to the effects of cold.

"My own place is about fourteen miles from Long Island Sound and at an elevation of 600 feet. The usual extreme cold in winter is zero or a few degrees below. The coldest I have seen in fifteen years is 15 below two or three times. Winter killing is little in evidence on my English walnut trees except after these severe winters. Last year most of the trees were considerably affected but most of them not seriously so. Those that showed the most winter injury are a variety for hardness of which the greatest claims are made.

"The hardest strain that I have is the Chinese walnut, *J. regia sinensis*. One of these trees, which has borne a single nut each of the past two years, showed no injury. Another tree in a little more exposed location showed moderate injury.

"Next to these, and I am not sure but that they are equally hardy, are the old French varieties, Franquette and Mayette. I don't know anything better than these, in fact, in every way except, perhaps, that the Chinese walnut seems much less susceptible to the attacks of the *conotrachelus juglandis*. But this, of course, can be controlled by spraying.

"I am sorry I can't help you more. You have got to experiment with everything, all varieties. But I don't believe you are ready yet to set orchards of 7,000 English walnut trees anywhere in Arizona."

Pecan Experience in S. C.

Editor American Nut Journal:

I feel that I should write a short article on pecans for your valued paper, not that I like to write articles but that it might be helpful to some prospective pecan planter. There are enough now of us older planters to be of some good to the beginners, if we give them our experience and they read and take notice. I know there are a number of trees in my orchard now that would not be there if I had known then what I know now. In 1902 and 1903 most of us planted budded trees just because they were called budded trees. In this article I wish to use the con-

demnation route. That is, I intend to condemn all the trees in my orchard that are not giving satisfaction.

My first trees planted in 1902 were two varieties, Bolton and Clark. These are fairly good bearers, but the nuts are too small and have poor cracking qualities. Would not advise anyone to plant these in South Carolina. Atlanta and Louisiana are two more that are in the same class and not worth planting in this section. Georgia Giant and Jacocks Mammoth I would not plant, poor bearers, and thick shell. Frottscher Egg shell, fine appearing nut, bears well with me but nuts do not fill well; in fact, they are nearly all hulls with me. I would not plant this variety in this section. The old Columbia, the much condemned nut by everybody who writes an article, is doing fairly well with me as a bearer, but the nuts have to be cracked with a hammer.

Now comes the much praised and abused Stuart—that is, some praise it and some condemn it. For my part I would not plant another Stuart if some one would give me the trees. After fifteen years' experience with this variety I haven't been able to get any salable nuts to amount to anything. The older the trees get the worse they are. The nuts are full of holes or hide bound from husk worm. Now with all this trouble out in open field culture, I have one Stuart tree in my back yard in hard ground which I budded myself. It was set out seven years ago. Had last year 24 pounds of fine nuts and the year before when all others failed this tree bore 28 pounds of nuts by actual measurements. While this is fine for this section, yet I haven't got enough kitchens and back yards to put these trees in.

The Schley, the finest nut in the world as a nut, does well while the trees are young, but has a tendency to become smaller as the trees grow older. I believe this variety could be helped out by irrigation during September, though I have not tried this. The Success is a very fine nut, and one that I would rather eat from hand than any other. I believe this will prove a good variety for this section. It's a good bearer and the trees are very late bloomers; in fact, it's the last tree to bloom in my orchard. Van Deman is a very good bearer, also comes in early; but I have lost quite a number on account of pecan weevil. Teche is one of the best bearers, but the nuts are of poor quality, though they are a very good help when others fail. Curtis, a very fine quality nut, small, but good bearer. Crows are very fond of this nut on account of its thinness of shell and fine qualities. Delmas is the best nut I have, the best bearer, and the only nut I have been able to realize any money from. While the quality of this nut cannot be called first class, yet for commercial purposes it is a good one for this section, being of good size, fine cracking qualities and a heavy bearer. If you want peaches for sale, plant Elbertas; so, if you want pecans for market plant Delmas. Alley, Nelson and Mobile are three new ones with me and haven't been tried out, as they are just coming into bearing; though I must say that the Mobile is a very fast growing tree and it's to be hoped that the nuts will be good fillers.

In 1919 I got from my orchard 2250 pounds of nuts. In 1920 I didn't get any. In 1921 I made 1650 pounds; average price received about 36c per pound. I should be glad if some of the other writers from the field would give me their experience along this line.

A. B. SAMPLE.

Greenwood, S. C.

ASSOCIATION ACTIVITIES

Georgia-Florida Pecan Growers to Meet

The sixteenth annual meeting of the Georgia-Florida Pecan Growers Association will be held at the Tosco hotel, Thomasville, Ga., May 24-25. J. M. Patterson, Putney, Ga., is president; J. Slater Wight, Cairo, Ga., secretary.

Mayor H. J. McIntyre will welcome the members. H. H. Simmons, Jacksonville, Fla., will respond. The program follows:

President's address.....
J. M. Patterson, Putney, Ga.
Top-Working Pecans, Some Methods and Results...O. M. Hadley, Thomasville, Ga.
Discussion.....J. B. Wight, Cairo, Ga.
Methods of Cultivating Bearing Groves...
William P. Bullard, Albany, Ga.
Discussion...W. W. Bassett, Monticello, Fla.
Proposed Tariff on Mexican Pecans.....
B. W. Stone, Thomasville, Ga.
Cover Crops for Pecan Groves.....
Harry U. Jackson, Baconton, Ga.
Growing High Quality Pecans.....
C. A. Reed, Washington, D. C.
Discussion...A. C. Snedeker, Blackshear, Ga.
Scab—Reports from various producing centers.

Handling of Low Grade Pecans.....
C. A. Van Duzee, Cairo, Ga.
Fertilization of Pecans and the Influence of Fertilizers of Various Compositions on the Quality of the Nut.....
Dr. J. J. Skinner, Washington, D. C.
Kernel Spot—Cause.....
J. B. Demaree, Thomasville, Ga.
Control.....W. F. Turner, Thomasville, Ga.
THURSDAY
Advertising Pecans.....
Jefferson Thomas, Jacksonville, Fla.
Co-operative Marketing:
(a) The New Marketing Law H. R. 2373; law read by secretary.
(b) Common Standards and Uniform Price.....C. A. Simpson, Monticello, Fla.
(c) Experience in Marketing Crop—Why Prices Were Demoralized.....
R. M. Small, Macon, Ga.
(d) Necessity of Co-operation.....
James S. McGlennon, Rochester, N. Y.
(e) Methods of Co-operative Marketing
L. M. Rhodes, Jacksonville, Fla.
Miscellaneous business; reports of committees; selection of place of next meeting, election of officers.
A banquet will be held at the Tosco hotel Wednesday evening

TEXAS PECAN GROWERS CONVENTION

The annual meeting of the Texas Pecan Growers Association will be held in Brownwood, Tex., May 23-24. Secretary J. H. Burkett has prepared the following program.

"Topworking Native Trees as a Means of Improving Our Fruits."—F. B. Guinn, Rusk, Texas.

"What I Know and What I Don't Know About Pecans."—F. T. Ramsey, Austin, Tex.
"Expense of Topworking a Native Grove."—T. H. Ridgeway, San Antonio, Texas, and J. H. Burkett, Clyde, Texas.

"How the Walnut Growers Market Their Nuts in California."—C. Thorpe, manager of California Walnut Growers' Association.

"How to Succeed in Marketing Our Native Pecan" (experience and suggestions).—C. D. Jarratt, sales manager, Texas Pecan Growers' Exchange, San Antonio, Texas.

"The Development of a Pecan Grove" (illustrated by slides).—Prof. E. J. Kyle, College Station, Texas.

"Report of Legislative Committee Relative to Pecan Marketing."—Governor Will H. Hayes, Austin, Texas

"Experience in and Lessons Learned in Topworking Native Pecan Grove of Fifty Acres."—Dr. A. Caswell Ellis, Austin, Tex.

"Suggestions and Details of Plans for Solving Our Pecan Marketing Problems."—Col. Ike T. Pryor, San Antonio, Texas.

"Standardizing, Grading and Classifying Our Texas Pecans."—E. W. Cole, director of markets, Austin, Texas.

"Pecan Insects and Their Control."—A. I. Fabis, United States Bureau of Entomology, Brownwood, Texas.

TRANSPLANTING WALNUT TREES

(Continued from page 59)
as before. If need be, use little twigs to hold them in proper place.

When all the roots are covered in, the root system will be in the shape of an inverted fan wedged in between two solid walls. If planted in November, by April the side roots will be found to be full of little white rootlets, one-eighth of an inch to one-quarter of an inch long, penetrating either wall. This is the only way I have found to replace a tree in as tight a condition as we find them in Nature.

Of 320 trees planted, all walnuts, I found only one dead, and I never looked to see what was the matter. Whenever I pass that tree, I feel a sneaking guilt. While I have planted another by its side which will soon be in bearing, I leave it there as a reminder—never to be careless.

The saving over the old method of planting amounts to about 75%.

C. R. BIEDERMAN.

Hereford, Ariz.

Urges Renewed Effort

Editor American Nut Journal:

I have just read an article by R. A. Harris, Riverside, Cal., in the current issue of this paper, in which he tells us of having success with the pecan, after its probable success had been very much doubted and disputed. He also tells us of the success of almonds, apricots, figs, olives, oranges, etc., all of which had been predicted would be failures if planted on a large scale, and none of them native to the state.

It seems that from the above statement we of northern nut culture should take heart and not consider ourselves restricted to any narrow limitations in the possibilities that may lie before us. And the mere fact that a nut or fruit tree is not native with us should in no way discourage the possibilities or probabilities of its culture in our climate, if not in a general way, at least, in some sections.

Mr. R. A. Harris also tells us that nut culture has only reached its baby stage; and that only a bold man would predict its limitations. He is surely right in this statement, for no doubt, the next twenty-five years will see many surprises (and, of course, some failures) in our different lines of endeavor, but let us hope that the "sur-

Southeast Georgia Pecan Growers

The Southeast Georgia Pecan Growers Association was formed recently at McRae, Ga. It will be affiliated with the National Pecan Growers Exchange. The association will be a means of disseminating pecan information to all growers, for its directors will be chosen from among the best informed pecan men in the district, and one feature of the work will be periodical service letters to members dealing with the best practices of care, cultivation, etc., as they affect this particular territory. This information will be supplemented by data secured from the members from time to time as to their particular experience with the varieties, modes of care, and hundreds of other subjects of vital importance to a grower of pecans. Then, too, the semi-annual conventions of the association held in different parts of the district will offer an opportunity for unlimited discussion of the problems of the industry.

This association will cover the Southeastern part of the state, and it is expected that within a few months all the growers in the first, tenth, eleventh and twelfth congressional districts will be listed as members and begin securing the benefits of the association. The annual dues for members have been placed at three dollars to cover the small cost of clerical work, postage, etc., as the officials and directors are giving their services without charge, for the advancement of the industry. The owner of even a backyard grove can receive more benefit than this small cost will amount to.

prises" will more than compensate us for the disappointments we will meet.

So let us take a new interest in our affairs, and let us not give up until we have accomplished something worth while. Let us not say that it can't be done; but by using a little discretion and common sense in what we do, let us say there is a possibility that it can be done.

We have undoubtedly some great possibilities waiting for us to develop here in the northern states. Who will find them out? Who is not a coward? Who will venture? Time will only tell. Let us take the bull by the horns and fight it out.

CHAS. O. HENNINGER,
707 Terrace Ave.,
Indianapolis, Ind.

Combating Black Bug

Gulfport, Miss., May 2—Professor K. Harmon, State Plant Board citrus fruit inspector and entomologist, after investigating the black bug which recently made its appearance at Nugent, pronounced it the May beetle, and he also found that it is damaging to some extent pecan groves throughout Harrison county. He suggests building fires around the trees to attract the insect and scorch its wings.

THIS SPACE

\$2.50 Per Month Under Yearly Contract

Including publication in both
NURSERYMAN and AMERICAN NURSERY TRADE BULLETIN.

One Month: \$2.80 in both.

BUDDED and GRAFTED Nut Trees

Start right with my hardy Pennsylvania grown trees and be assured of success.
Attractive Catalogue Free.

I have this season a fine lot of stake trained Pecan, English Walnut, Black Walnut and Persimmon trees budded on root pruned transplanted stocks, that will please you and that will transplant easily and safely. Write for catalogue.

J. F. JONES, The Nut Specialist
LANCASTER, PA.

CONSULTING TROPICAL HORTICULTURIST and TREE EXPERT

HARVEY C. STILES

COLUMBIA, TEXAS

Specializing in Pecans, Grapefruit, Avocados, and Landscape Development. Long experienced expert for—and present active director of—many such large projects throughout tropics and semi-tropics. Examinations, Reports, Plans, Specifications and Estimates. Correspondence suggested.

American Nut Journal

**DEVOTED TO NUT GROWING INTERESTS
GENERALLY THROUGHOUT THE AMERICAS**

Vol. XVI, No. 6

JUNE, 1922

Per Copy 20c.



J. M. PATTERSON, Putney, Ga.

President Paper Shell Pecan Growers Association; President Georgia-Florida Pecan Growers Association; Vice-President National Nut Growers Association; Chairman Federal Aid Committee of National and Northern Nut Growers Associations.

Head of Delegation Which Attained Marked Results In Behalf of Pecan Culture at a Recent Special Conference With Secretary of Agriculture and Bureau Chiefs in Washington, D. C.; Director of Thousands of Acres of Pecan Groves in the Albany, Ga. District.

39 STATE ST.



ROCHESTER, N. Y.

American Fruits Publishing Co.

READY TO PLANT IN THE NORTH

Editor American Nut Journal:

In his letter published in the Journal for May, Mr. Chas. O. Henninger of Indianapolis surprised me in quoting with approval the statements of Mr. W. A. Thomas of Lincoln, Nebraska, that we are "not progressing" in nut culture, and that "in forty-eight months he has not received any information that is reliable or of any real value in furthering his ambitions in the line of nut culture."

Mr. Henninger asks, "Why does not the Northern Nut Growers' Association give us a foundation on which we can base our hopes? The chestnut seems to be a hardy tree and apparently a good bearer and money maker. Then why not let us plant chestnut orchards here in the Middle West as a good working basis? Well, is not Mr. Henninger in this not only negating himself but also defending the Association? Chestnut planting in the West is precisely what the Association has advocated repeatedly in the last few years. The success of this has been amply demonstrated by Mr. Riehl. He has done the same for the black walnut, which may be put beside the chestnut. In fact the Middle West is better off than the East which cannot plant the chestnut commercially on account of the blight-harboring native chestnut.

There can be just as little question of the adaptability of the Indiana and Iowa pecans, splendid nuts too, to a large part of the Middle West, in and adjacent to the regions where they are now flourishing natives. These are three excellent nuts of demonstrated commercial value, for the planting of which in the localities known to be suited to them the Northern Nut Growers' Association has been consistently fighting for years.

But Mr. Henninger says that he is "not at all interested in the kind of nuts that are native here," and does not "see any money in their culture." That is the sort of argument difficult to combat, if it is an argument. He must then, necessarily, if he wishes to continue, enter the field of experimental nut growing. Here, too, the Association points out to him what has been done and some of the mistakes to be avoided. He is probably wise in turning down the English walnut as unsuited to the Middle West, and the Association has always been conservative in advocating even its trial in those regions. Let him experiment with the filbert, of which he can get excellent varieties in quantity, and with the Japanese walnut, which is undoubtedly hardy and a good bearer, but the value of whose nut is still problematical.

I have, myself, the conviction of the assured success of the topworked hickory throughout all that large part of this country where it is native. The shagbark, shellbark and valuable hybrid hickories, all grow luxuriantly when topworked on native growth. Dr. Morris' topworked hickories, and my own have been bearing a few nuts for several years, and no reason can be seen why their productiveness should not increase in proportion to their luxuriance of growth.

So, if we must give up any hope of growing the English walnut, the almond and the southern pecan in our territory, we have all the other nuts; the chestnuts (and let us not forget the chinkapins) as proved successes in at least some parts of the Middle West; the black walnut over a great part of the country; the northern pecans in a large, but yet undefined area; the native hickories topworked to shagbarks, shellbarks and hy-

brids well on the way to proof of success, and the filbert and Japanese walnut demonstrating their possibilities.

What more could one wish? It is difficult to understand the pessimism of Mr. Henninger and Mr. Thomas. Can they not be more specific? In what could the Association do more to help them? Nut growing is a young industry that has difficult problems. Else would it be already on the footing of fruit growing. It is, by nature, a thing that takes long years to work out. If these gentlemen wish merely to follow in the footsteps of others who have worked out methods whose assured success has been demonstrated by many years of trial under all conditions, methods that only have to be followed to lead to certain success, let them take up some other form of horticulture than nut growing. If, on the other hand, they wish to be themselves among those pioneers who are working out methods that will surely lead to great success, let them plant nut trees, with the best information they can get, let them follow the method of Mr. Halbert, and the other great nut growing pioneers of the South, and win similar crowns of satisfaction and genuine, even if limited, glory.

Hartford, Conn.

W. C. DEMING.

THE PECAN

Co-operative Marketing
Experience of Marketing 1921 Crop—Why
Prices Were Demoralized—Address Before
Georgia-Florida Pecan Growers Association,
Thomasville, Georgia, May 24-25

By R. B. Small, Macon, Georgia

1. Economic Conditions.
2. Quality of Nuts.
3. Quotations from large number of small producers and anxiety for quick returns.
4. Ungraded offerings.
5. Largest crop in history of paper shell variety.

The paper shell pecan is the best nut in the world, but at retail prices from 75c to \$1.00 it is a luxury, and in the fall of 1921 luxuries were cut to the bone by everyone in all lines, and this applied to pecans as well as everything else. Therefore, the demand for paper shell pecans was restricted and naturally this had its proportionate effect on the returns that the producer or grower received.

We all know that in some sections the quality of some varieties was very much off last season in that the kernels did not fill out, for a great many varieties that had filled out well in former years did not fill out last year. Some of the growers, knowing this, offered their nuts at low prices in order to move them, but other growers, thinking they could get by, held their prices up and had many complaints and returns and dissatisfied customers.

Large numbers of small growers had crops ranging from 100 to 1,000 pounds, and they were anxious to turn these into money and to get their money quick; because last fall dollars were very scarce and obligations were very pressing, and a small grower would take a big discount for his crop rather than take the chance of waiting 30 or 60 days to get a better price.

While a great many of the larger growers or those with larger crops are now grading their nuts and selling them either according to size or according to variety, the fact re-

mains that the majority of the small growers are not educated up to and not equipped for grading. Therefore, large quantities of nuts are sold in mixed lots containing all varieties and all sizes, and naturally, such being the case, the small sizes would bring down the price of the entire offering.

Last year we had the largest crop in the history of the paper shell variety and we were not prepared through our marketing agencies to take care of same. It is true that many of our people did a nice business; but their business was cut down on account of economic conditions, quality and low price offerings, and then those who had been handling nuts in a commercial way were not able to handle at regular prices their entire crop for the same reasons.

If we want to get away from conditions that we experienced last fall it is going to be necessary for us to have some kind of co-operative marketing and a method or system of grades or varieties; for, just so long as we continue to offer our pecans in mixed lots ungraded and have large numbers of individuals or agencies offering nuts at all sorts of prices, the results are going to be anything but satisfactory.

Pecan nuts, as soon as we begin to get sufficient volume or tonnage, will have to be handled as a commercial proposition and on a competitive basis with other nuts now on the market. On account of the quality of pecans we naturally expect to get a much higher price for them than for other nuts, but we cannot hope to get the unusual high prices we have been obtaining for the last few years; and, therefore, it is going to be necessary for us to satisfy ourselves that prices will have to be cheaper in order to move the crop and to compete with other nuts, both domestic and foreign, that are on the market.

The commercial way to handle nuts would be to handle them through various exchanges located throughout the pecan belt which would co-operate with each other as to prices and grades, both as to size and variety, and would offer their output, put in attractive strong containers, through brokers to wholesale jobbers and manufacturers and confectioners, and these in turn would sell the crop to the retailer and so on to the consumer.

The California walnut and almond growers are pretty well organized in their marketing agencies. It has been a practically easy matter for them to get together on account of being so near each other as regards distance and location. But when we consider the pecan belt which reaches from Virginia through Texas and gets up into Illinois and Indiana we see we will have an impossible task to get pecan growers together in regard to the marketing of their crop. As Southwest Georgia and Northwest Florida at present are headquarters for the large paper shell varieties, it would not be such a tremendous task to get this immediate section lined up with marketing exchanges, and if we in Georgia and Florida could start the marketing plan in the right way it will be an inducement for other sections, where the tonnage of nuts is large, to follow along similar plans and to co-operate with us.

We have a tremendous job before us and one that will take the very best brains and the greatest patience to bring to a successful issue; but in order to achieve maximum results from our investment, which are just now beginning to pay nicely, we are going to have to pull together and work together for our common interest.

AMERICAN NUT JOURNAL --- JUNE, 1922

EDITORIAL DEPARTMENT—Communications on any subject connected with Nut Growing and Distribution are cordially invited by the editor; also articles on this subject. We shall be pleased to reproduce photographs of trees of interest, methods and scenes connected with the Nut Industry; portraits of individuals, etc. Suggestions are cordially welcomed.

ADVERTISING—Advertising forms close on the 10th of each month. If proofs are wanted, copy should be in hand on the 1st.

Advertising rate: 20 cents per agate line; \$2.80 per column inch for any amount of space.

Advertisements that do not represent reliable concerns will not be accepted.

SUBSCRIPTIONS—The "American Nut Journal" will be sent to any address in the United States for \$2.00 a year; to Canada or abroad for \$2.50 a year. Three years: In United States, \$5.00; Canada, \$6.50.

Add ten cents for exchange unless bank draft, express or postal money order is used.

WHAT THIS JOURNAL STANDS FOR—Reliable information on all phases of the Nut Industry. It is for the advancement of Nut Growing in general; it is in no way confined to the interest of a particular kind of nuts, nor of a particular section. It is broad in scope and absolutely independent. The aim of "The American Nut Journal" is to stimulate thousands of persons into developing interest in one of the greatest food supplies of the future—to line the roadsides and fill the waste places with trees of a sort which yield dollars worth of fruit every year instead of the mere bunches of leaves resulting from present shade and ornamental planting. At the same time it will record the progress of the industry, the latest descriptions in the note book of the biologist and plant physiologist, the rapidly expanding knowledge of methods, the increasing acreage, and in short the news as it develops of an industry whose importance is recognized by an increasing number of persons in all sections.

Entered as second-class mail matter June 6, 1914, at the post office at Rochester, N. Y., under the Act of March 3, 1879.

AMERICAN FRUITS PUBLISHING COMPANY, Inc.

Ralph T. Olcott, Editor and Manager

121-123-125 Ellwanger & Barry Bldg., Rochester, N. Y.

Classified Business Announcements In This Issue.

Bassett, W. W. Pecan Trees	74	Nut Information	Special Topics	67
Bechtel's Pecan Nurseries... Grafted Pecan Trees	74	Nuts as Staple Food..... Dr. J. H. Kellogg.....		67
Florida Nurseries Pecan Trees	74	"Nut Trees for the North". Expert Advice		67
Indiana Nut Nursery..... Northern Pecan Trees.....	74	Ross, O. A..... Pecan Grove Expert.....		76
Jones, J. F. Grafted Nut Trees.....	76	Simpson Nursery Co..... Hale's Hickory		74
Lancaster Nut Nurseries... Northern Nut Trees.....	76	Stiles, Harvey C..... Tree Expert		76
"Nut Growing" New Book	72	Stone, B. W. Pecan Trees, Nuts, Groves.....		74
Longacres Pecan Plant'n... Grove for Sale.....	75	Texas Pecan Nursery Budded Pecan Trees.....		74
		Wilkinson, J. F. Grafted Pecan Trees.....		74

IMPORTS OF NUTS INTO THE UNITED STATES, FOR CONSUMPTION, DURING THE LAST THIRTEEN YEARS (Compiled by Bureau of Commerce and Navigation, Department of Commerce, Especially for the "American Nut Journal.")

KIND	1907	1908	1909	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919
Almonds—not shelled.....lbs	5,714,207	8,515,688	2,120,632	6,810,036	3,762,634	5,212,563	2,363,860	5,501,059	4,684,594	2,368,369	4,901,168	6,149,374	7,482,536
Shelled.....lbs	8,717,952	8,556,162	8,538,054	10,485,750	12,160,635	11,692,988	12,655,057	13,846,621	12,168,153	13,210,668	19,180,254	21,544,757	28,007,906
Apricots and peach kernels lbs.				27,854	13,351	7,939	18,769	18,572	67,164	11,926	250,075		
Coconuts in the shell... Dollars	\$1,349,380	\$1,439,589	\$1,246,463	\$1,298,970	\$1,704,262	\$2,012,203	\$1,793,713	\$2,150,500	\$1,593,666	\$1,891,328	\$2,583,560	\$2,490,368	\$4,063,262
Coconut Meat broken or Copra not shredded, desiccated or prepared.....lbs	7,064,559	14,121,576	23,742,518	20,830,539	38,081,984	61,505,787	34,283,592	44,459,158	88,690,382	108,507,765	247,043,127	430,649,332	258,637,781
Desiccated, shredded, cut or similarly prepared.....lbs	3,476,698	5,584,632	5,461,602	5,985,308	6,561,850	5,396,465	6,826,095	9,307,924	5,866,806	7,947,390	10,491,796	20,269,909	29,637,674
Cream and Brazil.....bu.	280,633	310,418	409,644	461,496	277,679	21,601,008	11,933,139	11,431,531	12,483,319	12,489,217	16,230,023	11,282,088	43,076,363
Filberts—not shelled.....lbs	9,960,290	8,997,246	7,365,837	10,026,961	10,084,987	8,375,890	8,586,278	10,360,072	10,922,248	10,003,552	16,468,547	7,432,524	16,747,349
Shelled.....lbs	1,553,332	1,343,594	1,384,689	1,413,391	2,332,606	1,368,835	1,450,620	1,798,147	1,722,105	1,259,540	2,280,787	4,245,863	3,778,906
Marrons, crude.....lbs				10,270,388	9,968,879	14,845,345	10,157,321	18,849,257	12,549,959	15,754,796	6,275,030		5,021,146
Olive nuts, ground.....Dollars	\$1,016	\$1,027	\$590	\$478	\$236	\$206	\$312	\$385	\$25	\$112	\$420		
Palm and Palm Nut Kernels "	\$3,350	\$2,250	\$2,752	\$6,907	\$5,744	\$7,970	\$4,872	23,127	31,900	1,104,885	626,435	16,905,313	5,610,066
Peanuts or Ground Beans.....lbs	10,432,828	6,498,202	7,326,371	11,297,172	11,055,823	12,660,433	12,140,612	17,298,778	14,075,387	9,623,411	7,710,082	1,970,797	5,667,354
Unshelled.....lbs	4,780,054	1,775,946	1,302,919	16,089,919	7,821,505	3,127,324	7,823,173	21,819,101	11,695,507	18,739,888	27,548,928	67,746,831	24,179,687
Shelled.....lbs				3,349,460	2,333,037	2,607,227	1,803,434	2,621,161	2,032,539	1,265,382	4,076,933		
Pecans.....lbs	23,036,646	21,427,853	17,432,885	23,269,974	21,146,116	22,208,845	16,363,046	16,134,211	20,988,326	22,610,418	17,177,992	3,304,003	21,235,078
Walnuts—not shelled.....lbs	7,189,988	7,098,968	8,781,908	10,960,988	11,244,054	10,713,286	10,093,622	11,636,053	10,552,956	13,445,790	12,257,593	9,707,401	10,260,809
Shelled.....lbs													
All other shelled or unshelled, not specially listed.....lbs	10,598,186	10,441,327	9,938,337	3,584,544	2,962,663	3,050,989	3,600,056	7,426,313	3,272,492	2,772,589	2,768,634		
Total of nuts imported Dollars	\$9,315,891	\$9,563,742	\$8,549,997	\$12,775,196	\$14,265,572	\$15,626,485	\$13,548,307	\$19,815,713	\$16,865,244	\$20,594,434	\$33,667,688	\$49,930,283	57,499,04

a—pounds.

Nut Culture Information

Reprint folders on topic discussed in American Nut Journal. 10 Cents Each

Grafting and Budding the Walnut—U. S. Dept. Agriculture.

Pecan Areas of the United States—W. P. Reed.

Walnut Trees For New England—Dr. Robert T. Morris.

Some Walnut Varieties—Dr. L. D. Batchelor.

Chip Buds For Nut Trees—Charles L. Edwards.

Grafting, Budding, Topworking—Dr. W. C. Deming.

Breeding Chestnuts for Disease Control—U. S. Dept. Agr.

Advent of Nuts as Staple Food—Dr. J. H. Kellogg.

Pecans As An Investment—Herman C. Locke.

Underworking Nut Trees—Charles L. Edwards.

The Ubiquitous Black Walnut—T. P. Littlepage.

Average Yield of Pecan Orchard in S. W. Georgia.

Value of Nuts As Food—Dr. W. C. Deming.

Improved Black Walnut a Good Investment—Henry Stabler.

Status of Pecan Industry—C. A. Reed, U. S. Nut Culturist.

Sources of Supply of Hazel Nuts—Bulletin Imperial Institute.

Top-Grafting the Walnut Tree—Ferd Groner.

Black Walnut As a Meat Producer—Henry Stabler.

Outline of Northern Nut Culture Activity—Dr. W. C. Deming.

Establishing the Filbert Grove—George Dorris.

Top-Working Northern Pecan Trees—J. F. Wilkinson.

Nut Trees for Highways and Public Places—W. S. Linton.

American Nut Culture—24-page Pamphlet Survey.

East Texans Reap Fortunes on Pecans.

Hazel Blight—Dr. Robert T. Morris.

American Nut Industry—C. A. Reed, Nut Culturist.

What Nuts to Plant in Northern States.

Pecan Rosette; Practical Treatment—W. A. Weaver.

English Walnut: Where To Plant It.

Nut Tree Grafting by an Easy Method—Dr. Robert T. Morris.

Purchase of Chestnut Tree With Reference to Blight—G. F. Gravatt.

Quick Results in Pollenizing Pecans—E. E. Risien.

Nut Trees to Reduce Food Costs—Chas. Lathrop Pack.

How To Guard Against Faulty Nuts—Harvey C. Stiles.

The Romance of the Pinon Nut Industry in New Mexico

Soil Fertility; Fertilizer Problems in Pecan Culture—J. J. Skinner, U. S. Department Agriculture.

The Future of the American Grown Filbert—Richard H. Turk.

AMERICAN FRUITS PUBLISHING CO., 39 State Street, Rochester, N. Y.

Annual Convention of Texas Pecan Growers Association

The second annual convention of the Texas Pecan Growers Association was held in Brownwood, Tex., May 23-24, President White, of Mason, in the chair. The members were greeted by the mayor. Better prices for pecans was the keynote of the convention. Papers and discussion bore strongly upon that point.

Throughout the two days session these points were given prominence:

1. Eliminate from the commercial pecan business the grower who persists in handling what is known as native or budded pecans; and permit nothing but top-worked varieties to be considered in the markets.

2. Require all county agents in the pecan growing areas of Texas, who are not acquainted at least with the rudiments of budding and top working pecans, to qualify as soon as possible in this particular; and the suggestion was made that such agents qualify by attending the pecan short course at the A. & M. College, and

3. Organize a pecan exchange through which the pecan growers might pool their products for a period of years, in order to obtain better prices.

The chairman of the Committee on Resolutions was W. A. Woodruff, of San Saba, who read the eleven resolutions. The first resolution, that which required county agents to sharpen up on their knowledge of budding and top-working trees, was assailed from several angles. It was also boosted from two or three angles, and in addition to the main motion there was a substitute offered and then a substitute for the substitute. Dean Kyle, of the A. & M. College, took the position that the resolution was too radical. The convention knocked off the rough corners, picked the burs out of it and ironed it down to where it merely suggested that the county agents take a course in pecan culture at the earliest possible moment or when it was feasible to do so. The resolution was then adopted.

The resolution which required every member of the pecan growers' association or exchange to be a top-worker or "budder" did not receive a second. H. A. Halbert, the seedling proponent, of Coleman, moved that this resolution be killed and this was done. A. W. Woodruff, chairman of the committee on resolutions, in his address on the Commercial End of the Pecan Business," which followed the reading of the resolution, declared that Texas would never have a commercial pecan market worth the name until the wild variety was entirely eliminated.

John T. Lee, of San Angelo, chairman of the committee on marketing plans, read the report of the committee which was voluminous. It will be published in full in the official report of the convention. One of the features is that the association affiliates for the handling of the crop through the exchange for a period of four years, and that the Exchange which is to be organized for selling the pecans is to be paid 3 cents per pound by the producer for such service. There is to be a board of directors and other managers all formed on a sound economical basis, all of which was explained in the report of this committee. No member is allowed to own more than \$500 worth of stock;

and in addition there are many other features which the pecan growers believe will solve their troubles in regard to satisfactory marketing. The pecan contract differs very little so far as practical results are concerned from the contract which the cotton association formed with the Farm Bureau Federation.

Dean Kyle, chairman of the committee on standardization of grades for fairs, reported that it would take considerable time for his committee to prepare this report as it was of a complicated nature. On motion the convention placed the formation of the report entirely in the hands of Dean Kyle, who will formulate the report and send it to the secretary who will announce it to the organization.

A telegram was read from Colonel William Capps, of Fort Worth, who stated that owing to illness he could not be present, but he trusted he would be on hand next year at which time he intended to give an old time barbecue at the Capps farm, near Brownwood. Col. Capps mentioned in the telegram that he hoped the convention would go on record in regard to a duty on foreign pecans shipped into the United States as all such shipments were a detriment to the pecan industry of this country. In this connection President White stated that he and Colonel Ike Pryor, some time ago took up the matter of congress placing a duty on foreign pecan shipments, and that the request reached congress after the present tariff law had left the House and gone to the Senate. The Texas members of the House of Representatives, however, promised to do all they could toward securing the tariff, in event the bill came from the Senate. In the Senate a duty of 4 cents per pound was placed on unshelled pecans and 8 cents on shelled pecans. The amount of duty asked was 10 cents per pound of unshelled and a higher rate on shelled pecans. President White said this was the situation at present and nobody knew just what would be done in regard to the matter.

In a brief address O. P. Griffin, county agent of Brown county, explained how the extension service of the A. & M. College could help pecan growers in forming a co-operative marketing association. Mr. Griffin declared the agents could not get out and organize nor assist in organizing such associations, but would give suggestions, or point the way. The work of the agents, he said, is general, for the work of the people, and not for any special class.

George B. Terrell, State Commissioner of Agriculture, addressed the association briefly this morning on the new marketing law, in the course of which many important phases were brought out.

In his address W. A. Woodruff declared that the pecan growers would have to devote their attention to producing the very best varieties of pecans if they hoped to build a market and receive a good price for their products. He said as long as the sorry wild pecan was permitted to compete side by side with the budded varieties great injury would be done the pecan market and the growers would not be able to receive the proper prices for their product. He ad-

mitted that there were vast quantities of fine pecans of the wild variety, but they were not of the permanent kind, nor of the quality for which the critical public was looking and which it was going to have. He told about working hard at San Saba for a long period testing out the meat value of wild pecans and found 42 per cent the very best that could be found. The public is looking for the pecan that approximates the nearest all-meat, and it is going to have it, regardless of the price it has to pay. Mr. Woodruff said most of the wild pecans, or that is, a large per cent of such pecans shipped out of this country were of the "pignut" variety and this was giving a blackeye to Texas pecans and to the pecan industry. He said he and his associates had bought 1,000 acres of land in San Saba county of which 400 acres would do for a pecan orchard, and would be set out in the best budded varieties. There were many wild pecan trees on this land that could be top-worked and this would be done, but wherever one was found that could not be top-worked it would be cut down. He referred to the various fruit and nut growers' associations of California and said the California producer never reached a satisfactory period in his career until he began to produce improved varieties, and the critical public demanded that these varieties be kept up to the very highest standard. This is true as to the pecan industry, and until the wild pecan is thrown into the discard, and no longer reckoned at all in the commercial situation, the Texas pecan growers will never reach that satisfactory state of production to which they are entitled.

The other resolutions which were reported and adopted thanked the officers of the association for their efficient service, the people of Brownwood for their kindness and courtesy, Dr. Rives of the Austin Presbyterian church, those who were kind enough to permit the use by the convention of the old Presbyterian church and all others, who had in any way helped make the convention a success.

Following are the committees which served:

Grades for Fairs: E. J. Kyle, W. T. Moore and Mrs. John Kemper.

Marketing Plans: A. I. Fabis, N. A. Palmer, John P. Lee, W. T. Moore, J. H. Burkett and O. P. Griffin.

Resolutions: A. W. Woodruff, D. F. Moore, A. C. Easley and Frank Morgan.

These officers were elected:

President—H. G. Lucas, Brownwood.

Vice-president—John P. Lee, San Angelo.

Secretary—Oscar Gray, Waxahachie.

Board of Directors—John P. Lee, San Angelo; J. H. White, Mason; A. Caswell Ellis, Austin; W. D. Baxter, San Saba; P. K. De Laney, Seguin; D. F. Moore, Lampasas; William Menzie, Menard; R. C. Slaughter, Stephenville; J. W. Bauer, Llano; N. A. Palmer, Comanche.

The present organization committee which was formed some time ago will have in hand the thorough organization of the pecan growers throughout the area covered by this association, and will be assisted in the work of organization by suggestions and helpful

direction of the Agricultural Department of Texas and of the Extension Service of the A. & M. College of Texas. The pecan area will be designated as districts by this committee and local groups or organizations formed, in the sign-up campaign marketing program. No action was taken in regard to discussing the matter of permanent headquarters but the general understanding and feeling among the pecan growers was that Brownwood is the logical point and will remain the readquarters. The organization committee has authority to get together whenever it chooses for the purpose of signing up the producers or growers in the respective districts; that is, to pool the contracts on the marketing proposition for the purpose of securing the most satisfactory market price for the growers.

The reading of a paper by H. A. Halbert of Coleman, on Pecan Propagation brought about a tilt with Mr. Moore, editor of the Pioneer Pecan Press. Of this matter the Brownwood Bulletin says:

This tilt between Moore and Halbert brought out the fact that there are two antagonistic wings of the pecan growing industry—one, that of which Halbert is the chief exponent which believes that permanent pecan orchards can be started and maintained and developed by planting the nut itself from trees of like kind.

The other side or wing believes that the best and surest way and the most progressive way is that known as budding, using known and satisfactory varieties to bud to hardy stock. Thus two pecan schools are in progress and each seems to be well represented by men who have given a larger part of their time and energies as well as their financial means to arriving at what they were pleased to call satisfactory conclusions. Mr. Halbert read a strong paper in support of his side of the question and this paper will be published in the official report. At the conclusion of the reading of the paper by Mr. Halbert, Editor Moore asked to be heard on a point of personal privilege and this being granted he went into details explaining why he had not published the article to which Mr. Halbert referred and which he read before the association. He said Mr. Halbert had been in the pecan business thirty years and had not been up to the time able to produce a pecan that would bear out his argument.

The insect exhibit shown by A. I. Fabis of the Bureau of Entomology attracted a great deal of attention and Mr. Fabis in the course of his paper on the Obscure Scale passed a number of infected pecan limbs and twigs among the audience for examination.

The illustrated daylight stereopticon views of many features of the A. & M. College which was in charge of Dean E. J. Kyle of College Station was very instructive and attracted a great deal of favorable attention. The large pictures presented themselves automatically, remained in view a few seconds and then gave place to another picture and each picture represented some part of the A. & M. college—buildings, grounds, students at work in the different departments, or in the fields, gardens, dairies, orchards and other places.

The pecan display put on by the Pioneer Pecan Press consisted of many varieties and was very much appreciated. The display put on by the A. & M. College was also large and consisted of many other fine features in addition to the pecan itself. This collection was at Brownwood last January and won high praise for its extensive as well as intensive nature.

Among those at the convention were:

W. C. Slaughter, Dallas; Ed. G. Slaughter, Dallas; R. M. Low, city; Mary Phillips, city; J. M. McCrory, Proctor; A. W. Woodruff, San Saba; Mrs. T. F. Neal, San Saba; Mrs. Mary Callahan, San Saba; Kellie Vardeman,

Single-Handed Progress in the North

Editor American Nut Journal:

Several years ago I photographed and measured the great pecan tree in the grounds of the Hartford Retreat. I find that it has increased six and a half inches in circumference, to nine and a half inches. It is a fine tree, but some of the smaller branches are dead; and rot and fungi are attacking it at the base.

On April 21st it was just "throwing the caps" from the buds. On June 6th it was loaded with catkins not yet shedding pollen and there was a good setting of pistillate bloom in clusters of four or five, with two or three others abortive, and with the receptive surfaces already drying up. So it looks as if the failure of this tree to bear nuts is because the pistillate bloom passes the stage of receptivity before the staminate bloom sheds pollen.

There appear to be no hickory trees in the neighborhood and even if there were they would probably pollinate too early for the pecan. I did not have an opportunity, as I intended, to save some hickory pollen and fertilize a few of the blooms by hand. Properly pollinated the tree would bear a good crop.

* * *

For several years I had heard of a Persian walnut tree "in the jail yard in Seyms Street," Hartford. In December I saw it, a tree about twenty-five feet high and about twelve years old. I was told that it had borne for three years past and that the nut was like "those you bought in the stores." It had made a splendid growth the past summer with sturdy shoots two and three feet long. It grew from the roots of a larger tree that was destroyed on the same spot.

This spring I went to get some scions. The tree had disappeared. I interviewed the sheriff. "Wall," he said, "There was a nice little maple pretty near that tree and one of them had to go." Think of a man like that for sheriff! He is taking care, with a lawn mower, that no more English walnut trees get started. But out in the back yard on a brush pile I found the tree and cut a bunch of fine scions, many of which are now grafted.

* *

It is a source of huge satisfaction to be

Richland Springs; Bessie Vardeman, Richland Springs; J. B. Shofner, Bangs; Mrs. J. B. Shofner, Bangs; N. A. Palmer, Comanche; C. F. Denney, Comanche; W. J. Hardin, Comanche; J. W. White, Mason; R. W. Fair, Arp; James P. Lee, San Angelo; R. R. Rives, city; W. D. McCulley, city; H. G. Lucas, Capps Farm; Brooke S. Ramey, city; W. T. Moore, Bend; J. R. Lewis, city; Harrahan Wheeler, Goldthwaite; Frank Morgan, Belton; D. F. Haralson, Goldthwaite; A. I. Fabis, city; D. F. Moore, Bend; J. H. Burkett, Clyde; O. L. Waldron, San Saba; Mrs. John Kemper, Denison; W. J. Marschall, Menard; E. J. Kyle, College Station; W. P. Mencias, Mason; Irl Hudson, Ardmore, Okla.; C. E. Ringer, Ardmore, Okla.; H. A. Halbert, Coleman; O. P. Griffin, city; G. S. Wilson, city; F. S. Abney, city; F. M. McDaniel, city; H. N. Beakley, San Antonio; R. C. Slaughter, Stephenville; G. W. Jenks, Stephenville; J. H. Ragsdale, city; Ross S. Wolfe, Stephenville; J. E. Fitzgerald, Stephenville; Earl Carroll, Stephenville; Mildred Fellman, city; C. D. Jarrett, San Antonio; D. C. Pierce, city; Mrs. J. G. Burton, Winchell; W. D. Pierce, Winchell; Mrs. R. A. Pierce, Winchell; Sam Grissett, Stephenville.

It is probable that the oldest delegate attending the Texas Pecan Growers Association is D. F. Haralson of Goldthwaite, who is past 83 years and is still hale and hearty.

Following adjournment many members of the convention went to the Capps farm

able to say that, on account of the productivity and accessibility of Mr. Jones and Dr. Morris, we can now come as near 100% success in the grafting of hickories as we are willing and able to be 100% perfect in all the known factors of success. When one looks back on the state of hickory grafting in the North ten years ago this is seen to be a real triumph. I feel only just a little hesitancy in saying the same thing about the walnuts.

It is not generally realized that the nut tree grafters have revolutionized the art of outdoor grafting. Compare the old cleft graft with its splitting and mutilation, its chisel, mallet and wedge, its sticky, hand-molded wax and its brief season, with the nut grower's bark or modified cleft graft, his melted paraffin applied with a brush and his long and comfortable season. And yet the agricultural journals are still describing the old methods in answer to anxious correspondents!

* * *

I don't mind telling a good joke on "me and the other grafted-tree cranks" for the benefit of Mr. Kelsey and the "seedling cranks."

Nine or ten years ago when I was planting a lot of black walnuts I gave a few to a man who was working for me. He took them home and planted them in good moist soil. Last year four of his seven trees bore good crops and the trees are far larger than any I have, not one of which has ever borne a nut. Funny thing faith is! But my neighbor let his trees alone, while there isn't a single one of mine that hasn't been beheaded at least once and otherwise maltreated as only a real nut crank can do.

* * *

Our president, Mr. McGlennon, in Washington in consultation with the Secretary of Agriculture over appropriations for nut culture investigations, wires me every few minutes about meeting him in New York with other members of the Executive Committee. He is working hard for a great meeting at Rochester, Sept. 7 and 8. Why is it that Barnum's circus draws so much bigger attendance than does the Northern Nut Growers Association?

Hartford, Conn.

W. C. DEMING.

where spraying work and demonstration by Dean Kyle was observed and much learned that will be useful to the development of the pecan growing industry. There was a barbecue in the evening at Lakewood swimming pool, the members being the guests of W. D. McCulley.

The Brownwood Bulletin contained excellent reports of the convention from which we have quoted liberally.

C. A. Reed in China

C. A. Reed, nut culturist, Bureau of Plant Industry, U. S. Dept. Agr., sailed from San Francisco, Cal., June 6th for China to study the walnut industry there. He will not return until about Christmas holiday time.

Former President William S. Linton, of the Northern Nut Growers Association, has been appointed a member of the National Committee of Forestry Taxation, by the president of the National Tax Association. Mr. Linton is a member of the Michigan Tax Commission. For years he has been active in reforestation matters and the planting on a large scale of useful trees, and no other feature enters into proper development along these lines to a greater extent than the vexed one of taxation during the period of growth.

American Nut Journal

COVERING NUT CULTURE

NORTH—SOUTH—EAST—WEST

AMERICAN FRUITS PUBLISHING CO., INC.
59 State Street - Rochester, N. Y.

RALPH T. OLCOTT, Editor and Manager

Official Journal Northern Nut Growers' Assn

Official Journal National Nut Growers' Assn

SUBSCRIPTION RATES

One Year, in advance.....\$2.00
Canada and Abroad..... 2.50
Single Copy20

ADVERTISING RATE

Per column inch.....\$2.80
Forms Close 10th of each month

ROCHESTER, N. Y. JUNE 1922

NUT ASSOCIATIONS

California Almond Growers' Exchange—President, G. W. Pierce; manager, T. C. Tucker, 311 California St., San Francisco.

California Walnut Growers' Association—President, C. C. Teague; secretary, W. T. Webber; manager, C. Thorpe, 1326 East Seventh St., Los Angeles, Cal.

Georgia-Florida Pecan Growers Association—President, J. M. Patterson, Putney, Ga.; vice-pres., A. C. Snedeker, Blackshear, Ga.; sec'y-treas., J. S. Wight, Cairo, Ga.

National Nut Growers Association—Pres., Charles A. Simpson, Monticello, Fla.; vice-pres., J. M. Patterson, Putney, Ga. and E. C. Butterfield, Winona, Tex.; secy., J. Lloyd Abbot, Spring Hill, Ala.; treas., J. Slater Wight, Cairo, Ga. 1922 meeting, Thomasville, Ga., Oct. 4-6, 1922.

National Pecan Growers' Exchange—President and manager, William P. Bullard, Albany, Ga.; vice-pres., J. B. Wight; secy-treas., A. D. Galt.

Northern Nut Growers' Association—President, James S. McGlennon, Rochester, N. Y.; vice-pres., J. F. Jones, Lancaster, Pa.; treas., Willard G. Bixby, 32 Grand Ave., Baldwin, N. Y.; secy., Dr. W. C. Deming, Georgetown, Conn. 1922 meeting, Rochester, N. Y., Sept. 7-8.

Texas Pecan Growers' Association—President, H. G. Lucas, Brownwood; vice-pres., John P. Lee, San Angelo; Secretary, Oscar Gray, Waxahachie.

Western Nut Growers' Association—President, Ferd Groner, Hillsboro, Ore.; secy-treas., C. E. Schuster, Corvallis, Ore.

NORTHERN ASSOCIATION PLANS

President James S. McGlennon of the Northern Nut Growers Association went to New York early this month to confer with other officers of the Association regarding plans for the annual convention in Rochester, N. Y., the first week in September. He had a conference with Treasurer Willard G. Bixby, Secretary W. C. Deming being unable to be present and Dr. Robert T. Morris being out of the city. Program details and other convention plans were made. It promises to be an interesting session.

Prophecies What Seedlings Will Do

R. H. Harris, Riverside, California, says he can absolutely foretell in pecan seedlings at one and two years old: The quality of nut the seedling will later produce; the size of the nut and the productiveness of the tree.

He will correspond with any who are interested in this subject and who have made progress in this direction in their investigations.

The Wellesley Pecan orchards, Capital Trust Co., Dover, Del., has been incorporated \$200,000.

Francis Rawle, Philadelphia, Pa., has a 200-acre farm and many walnut trees, near Valley Forge.

AN IMPORTANT CONFERENCE

A highly important conference in regard to protection of the great and growing pecan industry in the Southeastern states was held in Washington, D. C., June 5-8.

Last season's developments and discoveries this season clearly showed that more definite aid from the U. S. Department of Agriculture was needed. The prevalence of kernel spot and the spread of the case bearer must be remedied if the important pecan growing industry of the Southeast is to be preserved.

Foremost in the demand for practical assistance needed is President J. M. Patterson of the Georgia-Florida Pecan Growers Association which at its annual convention in Thomasville, Ga., last month directed a committee headed by President Patterson to go to Washington and lay the facts before Secretary of Agriculture Wallace in person. The delegation included besides Mr. Patterson, President C. A. Simpson, National Nut Growers Association; President James S. McGlennon, Northern Nut Growers Association; Prof. Turner, Georgia Board of Entomology; Elam G. Hess, Keystone Pecan Co.; A. S. Perry, Cuthbert, Ga.; Congressman Louis T. McFadden, Canton, Pa., who is interested in southern pecan property.

This party gathered in Washington on June 4th and conferred previous to the appointed conference with Secretary Wallace the next day. Briefs were prepared and notes were compared. At the office of the Secretary on Monday the delegation met heads of Department bureaus, Dr. Taylor and others. Secretary Wallace afforded every opportunity to the visitors to present the subject and listened intently. The 25 minutes apportioned to the delegation for the conference was extended to an hour and a half, during which Secretary Wallace and his bureau chiefs who had not visited the pecan territory learned much about the industry. The Secretary was entirely neutral; but some heads of bureaus who had been long in the Department showed by the stand they took on matters brought up, that they had not kept up in their information with the marked developments of ten to fifteen years in the pecan territory of the Southeast. They were under the impression that much of whatever development they had heard of was still under the domination of promoters whose methods would not stand the light of publicity; therefore, they had little or no interest in Federal aid for development.

Our readers who know that questionable promotion of pecan lands in the Southeast is almost entirely a thing of the past can imagine how busy the delegation immediately became in enlightening the Government officials. With as much composure as was possible under the circumstances, President Patterson and his associates expressed surprise that with the facilities at the command of the Department of Agriculture it should not be known there that in the last decade the Southeastern pecan industry has been transformed from a prospective proposition to a commercial producing basis under which carloads of pecans are shipped annually, a single association harvesting a crop of nearly half a million pounds of pecans in a single season.

At the conference were Dr. W. A. Taylor, head of the Bureau of Plant Industry; Dr. Quaintance of the Office of Deciduous Fruit and Nut Insects; Dr. Waite, of the Office of Deciduous Fruit Diseases; Prof. L. C. Corbett, Division of Pomological and Horticultural Investigations and Dr. Ball, head of scientific investigation in the Department

and Agricultural Budget Officer. Exhibits were made of the destructive nut case bearer; of nuts showing the kernel spot, and of the canned kernels under the vacuum process.

Secretary Wallace, after hearing the briefs prepared by members of the delegation, President Patterson's discussion, said he thought the pecan growers of the Southeast ought to have Federal assistance to compete with the attacks by disease and insect before depredations became serious. He suggested a 50-50 arrangement between the Federal and State governments in this matter. Dr. Turner said that was just what his state was prepared to offer.

At the suggestion of Secretary Wallace the delegation spent the following two or three days in conferring with the heads of bureaus at their respective offices, regarding details. Dr. Taylor admitted the need of assistance to fight insects and diseases in the pecan territory. He said it was a question of a supply of capable men and of money. Dr. Quaintance after being entirely changed as to his conception of the importance and soundness of the industry gave assurance that plenty of capable men would be forthcoming, but that they could not be put into the field before the middle of August. He said that \$9,100 was available for the work during the remainder of this year.

Dr. Ball assured the delegation that every assistance in his power would be given in the matter; in view of his connection with Department estimates this has an important bearing on general appropriation.

President McGlennon brought up the subjects of pruning demonstrations and irrigation projects in connection with pecan culture; the importance of these was at once recognized and they will be included in the work by the Federal Government.

Dr. Ball was under the impression that the pecan growers wanted a considerable fund; but when he was assured by Mr. McGlennon that what was wanted was a conservative amount in the aggregate—\$1000 here, \$2,000 there and perhaps \$5000 at another point, etc., to cover investigations in established orchards, rather than provision for an experiment station with long delay to get it into operation—he expressed marked interest and assured co-operation.

The members of the delegation were accorded every courtesy by the Department officials. They were taken in automobiles to Arlington, the Lincoln Memorial, Dr. Waite's experimental grounds, and other places.

At the conclusion of the conference President Patterson said:

"In my opinion this committee has done more for the pecan industry this week than has been accomplished by all other committees and representatives sent to Washington in aid of the industry. The results are highly important present and prospective."

Secretary Wallace will make a tour of the South soon and will visit the pecan districts. Dr. Ball will go in the fall. Assistant Secretary Pugsley has just returned from that section and is enthusiastic.

Secretary J. Lloyd Abbot of the National Nut Growers Association announced last month that the official proceedings of the Mobile convention last fall would be ready for delivery to members June 10th.

Cracking Nuts With Liquid Air

An article in Science Service says that experts in the national bureau of standards have cracked the hardest shells of nuts easily after immersing the nuts for 30 seconds in liquid air.

Georgia-Florida Pecan Growers' Convention

What is regarded as the most interesting meeting in its history was the sixteenth annual convention of the Georgia-Florida Pecan Growers Association, in Thomasville, Ga., May 25-26. There was a large attendance and the papers read with resulting discussion were of great value.

President J. M. Patterson, Putney, Ga., delivered the following address.

A PECAN RECORD—NOT A PROSPECTUS

This Association meets today for its Sixteenth Annual Convention. At the time of the initial meeting, the pecan industry existed only in the minds of the charter members of this Association and other kindred spirits. At the time the pecan industry was only a hope. A little later, say seven or eight years ago the industry became a faith. Today it is a reality.

The prospectus has given place to the record and while the record does not measure up to the glowing imagination and fervent hopes of the author of the prospectus, yet it is a record that both reflects credit on the pioneers of the industry and furnishes ample ground for optimism.

There have been failures in pecan growing just as there are failures in every line of human endeavor. These failures have been due largely to ignorance of essential conditions of success, inexperience, negligence and perhaps in some instances to lack of an honest purpose to make good; but there have been many successes; where the effort has been mixed with a modicum of brains, an abundance of energy and everlasting perseverance, a complete failure has not to my knowledge been recorded.

Personally I appraise as a success a pecan grove which at 12 or 14 years of age pays dividends of \$50.00 and up per acre net; while such returns, considering the long years of patient waiting may not be considered large, yet in view of the fact that a pecan grove at that age is in a stage and state similar to a boy at the age of 18 to 21, just beginning to be productive, I have no hesitation in pronouncing such a grove a success. At that age, the grove is just at the threshold of generations of fruitfulness.

It may be said truly that the men who are members of this Association and who are within the sound of my voice today (together with a few who passed to the Great Beyond) are the men who have made the pecan industry. Men who have made a success of pecan growing are almost without exceptions, the men who have felt the need of the helpful discussions which this association has staged through the years. This Association has been the clearing house of pecan culture ideas and the men engaged in pecan culture who have been too busy to attend the meetings of this Association are not among the recognized leaders in pecan industry. Is there any example of a strikingly successful pecan grower, who has been a stranger to the meetings of this Association?

We have done well today to pause in our busy lives and congregate for the exchange of ideas and experience. As our problem has been solved, others have appeared on the horizon. We have problems today and we are here to discuss them.

In building the program for this convention, an effort has been made to include in the papers and discussions all the serious problems that confront us today, and we have assigned the various topics to members and others who seemed especially quali-

fied by experience and observation to discuss them.

It is the desire of your president that this meeting shall be characterized by brief, snappy papers and discussions—all interwoven with good fellowship and inspired by the spirit of mutual helpfulness.

CONVERTED TO TARIFF DOCTRINE

B. W. Stone, Thomasville, Ga., discussing the proposed tariff on Mexican pecans stated that during the last five years importations of pecans from Mexico to the United States amounted to 2,333,000 pounds annually. "We do not want Mexican pecans," said Mr. Stone, "for their principal influence is to bear prices down."

"When at first I was solicited to influence my representatives in Congress in favor of a high tariff on Mexican pecans I wrote my representatives that it occurred to me that a high tariff on Mexican pecans would force them to European markets, and that later, should we wish to develop European markets for our surplus, we might find it in a hazardous condition on account of the low grade and unsystematic marketing of Mexican pecans.

"I now favor a conservative and strong tariff on American nuts for we are not working only for the immediate future, but for the good in the next ten or twenty years of the nut growers and the American people as a whole. Fail to protect nut growers and you will invite the greater quantities of foreign nuts. Since foreign nuts can be and are being produced at about one-third the cost of American nuts you will readily see that it will handicap our nut industry. If we American nut growers were out of the way, tell me what tariff would the American consumers soon pay if left to the mercies of foreign dictation?"

"Let Europe feed her starving millions with her edible nuts. We want to develop American industries and American acres. We have spent millions to reclaim waste rich deserts. We have spent millions to drain everglades. Should we turn around, and for the lack of a reasonable tariff prevent our people from developing these same reclaimed millions of acres? California walnut industry doubles every four years. I dare say the pecan industry doubles every four years. The West claims plenty of room for greatly increasing the acreage of almonds and walnuts. The Southern states are ready to greatly increase the pecan industry.

"To make it comprehensive, I will give quantities of all nuts in unshelled amounts. Last year we imported eighty-two million pounds. America, the richest nation of the world, is composed of a buying and consuming people. From the progress we have been making, the nut industry in the United States is much short of the demand and if properly protected will develop into a great, deserving, and national industry. Let us set our stakes for a tariff which should be the fruits of Americanism instead of partisanship."

Among the papers read were those on "Common Standards and Uniform Prices," by C. A. Simpson, Monticello, Fla., president National Nut Growers Association; "Handling Bearing Pecan Orchards," by W. P. Bullard, Albany, Ga., president National Pecan Growers Exchange; "Advertising Pecans," by Jefferson Thomas, Jacksonville, Fla., president Thomas Advertising Service; "Top-working Pecans," by O. M. Had-

ley, Thomasville, Ga.; "Marketing Problems," by R. B. Small, Macon, Ga.; "Co-operative Methods," by L. M. Rhodes, commissioner Florida State Market Bureau.

Resolutions were passed urging a special committee from the Georgia State Board of Entomology and the Florida Board, to go to Washington and show cause why the Government should send more men to assist in fighting the pests and diseases which threaten the pecan industry.

The officers were re-elected: J. M. Patterson, Putney, president; A. C. Snedeker, Blackshear, vice-president; J. Slater Wight, Cairo, secretary-treasurer.

One hundred attended a banquet at the Tosco hotel, at which A. S. Perry, Cuthbert, Ga., was toastmaster.

THE NEXT STEP IN THE NORTH

The whole situation as to nut culture in the Northern states has been succinctly outlined in the reply in this issue by Secretary W. C. Deming, of the Northern Nut Growers Association, to a communication in a recent issue of the *Journal* by Charles O. Henninger, of Indianapolis.

In the early days of the pioneer period—a period not yet passed—Northern Association leaders preferred to be ultra-conservative as to advice on planting known varieties of improved nut trees seemingly adapted to the Northern states—on a commercial basis. At all times they advocated experimenting with them. Of late, however, in view of the tests to which many trees of the improved varieties have been subjected as the result of time, these leaders have been advocating the planting of certain kinds in certain sections, with confidence.

It is upon just the subject that Dr. Deming touches in his brief communication which many of our readers will wish might be elaborated even to the extent of book form, that thousands of persons in the Northern states wish particularly to be posted on. That interest has been voiced by Mr. Henninger of Indiana and Dr. Thomas of Nebraska recently. It was voiced at the Lancaster convention of the Northern Association by John W. Ritchie, Yonkers, N. Y., and by President James S. McGlennon, Rochester, N. Y. It rests unexpressed in the minds of many more who would take up Nut Culture in the Northern States if they knew where to begin.

Evidently the arduous work of the pioneers has made marked progress. It has made persons think definitely along this line. It has aroused, by results already achieved, a desire to enter actively into the subject.

The Next Step is what the Northern Nut Growers Association should adopt as its slogan at the Rochester convention of the Association in September. We believe that may well be the key note of the annual meeting. An open-minded public has listened; it has been receptive; it has become greatly interested; it has even expressed desire to take hold and co-operate. What to do first, is asked.

To supply definite practical information seems to be the opportunity and the duty of the Northern Association right at this stage, while interest is strong. Let the Association work out a schedule of kinds of nuts for particular localities in the Northern states and say where the reliable improved trees can be procured, in detail; also let the Association give instructions in particular as to the planting of the trees and their care, etc., together with a conservative estimate as to results which may be expected with some comparisons with other tree crops.

The American Nut Trade: Market and Crop Reports

THE PECAN

Native Pecan Crop In Southwest

The outlook for Texas is that there will be a comparatively small crop of pecans this year. It is natural to assume that after a good crop there should be a short one. South Texas which figured so largely in the deal last year will have a very short crop. There will be comparatively few pecans in the district around Austin and San Antonio. The Uvalde section reports about one-third of a crop. From Brownwood north there is prospect of about one-half of a normal crop.

There is prospect of a full crop in Mason, San Saba, Kimble and Gillespie counties.

It is probable that there will be 250 to 300 carloads of pecans in the state, provided there are no further insect depredations, and provided also that the crop can all be harvested. In the district about Austin, for instance, many of the trees have no nuts at all; some have only a few; once in a great while a tree will have, perhaps, 50 to 75 per cent of a crop. The Austin district may not have more than 10 per cent of a crop. At Wharton an inspection this month failed to discover any pecans whatever.

The crop is exceedingly short along the Oklahoma border. South Oklahoma reports a short crop prospect.

An inspection shows that there will be almost a complete failure in Louisiana and very short crops in Mississippi and Arkansas.

Causes of Crop Failure

Dallas, Tex., June 7.—Opportunities for observing prospects for pecan crop this season have been local only. Owing to long drouth prevailing generally over the state, extending from the middle of June last year to February of this year the trees went into the present season in a weakened condition. The appearance of pistillate flowers that produce the nuts was far below normal here. A freeze during March just as sap was starting killed back the terminals of a large percentage of bearing twigs, another cause for scarcity of bearing flowers. Then when the trees were in full flower and the female blooms in a condition to receive pollen, continuous rains interfered with the setting of the nuts. A few brief intervals of open weather allowed some trees to make a fairly good setting; but the number of such trees as compared with the whole, is painfully small.

So with us, the crop will be far and away below normal, not only on native trees, but also in the case of the finer budded and grafted varieties. Reports from a few growers in other localities denote practically the same conditions as prevail here.

Within the past ten days the case-worm has put in its regular annual appearance and is working havoc in the home orchard, greater indeed, than upon any other grounds that have been visited. Three several attempts have been made to give the trees their regular spraying with arsenate of lead, and in every instance heavy, dashing showers have come just as the work was well started. All this has given free rein to the worms and they are carrying wholesale destruction to the baby nuts. There are some punishments in this life that a good man does not deserve. My trees that were irri-

gated last season made a good setting and the failure of other trees in the community has probably caused the visitation.

CHAS. L. EDWARDS.

Causes of Texas Shortage

Coleman, Texas, June 12.—Since making a report to the Texas Agricultural Department last week that the pecan crop would be normal, I have had occasion to make a more thorough investigation and will revise my opinion. My conclusions now are that the crop is short. In fact less than half a normal crop was set out and now on the trees, of the common wild trees. Two causes prevailed in this geographical section of Texas to bring this about. The first great prime cause was an unprecedented drouth during the past summer and winter that caught the trees loaded with nuts. It was a struggle for the trees to live and mature the nuts and about one-third of them failed to do this; what nuts did mature were inferior from the excessive and prolonged drouth. Hence the trees with such a burden of nuts to ripen and exist at the same time had no surplus vitality to put on fruit buds for this year of any consequence and they were weaklings. The second cause was heavy rains in this section about the time the male blooms were shedding pollen.

Now the first cause above stated prevailed over Texas and therefore I look for this to be an off year in the pecan crop except in North Texas where the trees bore no nuts last year and should have set a good crop of fruit buds last fall to produce a crop this year, if the rains were not excessive during pollinization. Then if the insects should come in for a share,—often the lion's share, there will be little or none for man.

H. A. HALBERT.

Pecan Trees For Texas Highways

Cuero, Tex., June 5.—Dinter Post of the American Legion is backing a plan to set out pecan trees along the highway between the hell gate bridge, four miles north of Cuero, and an equal distance east of town. They have asked Cuero residents to plant fine pecan nuts now and give them the little trees next February to use for this purpose. The trees are to be about one hundred and fifty yards apart on either side of the road, according to plans, and it may be decided to set out a palm between each two pecan trees.

In Brownwood Section

Brownwood, Tex., June 6.—We have had a number of favorable reports and one or two adverse reports as to the pecan crop in Texas. The crop is usually spotted. Last year we had a light crop in this section. We hope for a better one this year. In the San Saba country there is promise of a big crop.

RAMEY BROKERAGE & STORAGE CO.

Unusual Amount of Rain In Texas

Toledo, Tex., June 12.—Our crop of pecans promises to be very short; about 20 per cent of a normal crop. We have had more rain here than in any spring since we have been in the pecan business.

SABINE VALLEY PECAN NURSERIES.

Budded Pecan Conditions In Texas

Winona, Texas, June 5.—In regard to the present outlook for a pecan crop in our lo-

cality, wish to say, first, that we have only budded trees on our place and our trees are only ten to twelve years old. The present showing for a fair crop is good. Last year we lost easily 50,000 pounds by the nut case-betrer. This year we are fighting it with arsenate of lead, and it seems that we are getting very good control.

We have a good crop on our Schley, Frotscher, Teche, Moore, Success and Pabst; the Delmas only set about half a crop and Stuart is very shy. We have 1000 acres in pecans.

I have examined a number of seedling trees in this vicinity and they show from nothing to very light setting of nuts. Budded trees are better where I have examined.

E. C. BUTTERFIELD

Grade and Supply

The Dallas, Tex., News, editorially discussing the Texas Pecan industry, says:

There is no reason why a pecan marketing association should not be as successful as any other co-operative marketing association. Pecans are almost a nonperishable crop and the number of producers is infinitely smaller than the number of cotton or corn or wheat producers. Pecans require no special treatment for shipment and do not lose their attractiveness for the buyer by long display.

It is to be expected that the Texas Pecan Growers' Association, in making their marketing plans, will not neglect to specify definite grades for pecans, and see to it that means are provided to insure the proper grading of all pecans under their control.

Another matter which the pecan growers' association can not afford to overlook is the matter of dependability. Every large buyer prefers a steady supply of known quality and grade, and he will not long trade with any person or set of persons who can be relied upon in every detail, if more reliable sources can be found.

At San Saba, Texas

San Saba, Tex., June 8.—Pecan crop conditions in this locality promise around 75% of a normal crop. Information from other portions of the state indicate a light crop.

E. H. NORRIS.

In order that the pecan nut may continue to be one of Texas' foremost products, the American Legion of the State has pledged itself to plant groves of nut trees, see that they are properly transplanted and care for them when they are developed.

A NEW BOOK! NUT GROWING By Robert T. Morris

The latest and only up to date book on the newest and one of the most important branches of Horticulture, giving a broad survey of a rapidly growing industry. Detailed explanation of successful methods of propagation and the new process of grafting with the use of paraffin; illustrated.

An invaluable work for all nut growers.

Price. \$2.65, Postpaid

AMERICAN FRUITS PUB'G. COMPANY
39 State Street, Rochester, N. Y.

ALABAMA

Good Crops In East Alabama

Camp Hill, Ala., June 9.—The prospect for a good crop of pecans at Pecanodile and in East Alabama were never better, except in the case of a few varieties. The trees have taken on a good growth and have set a good crop. The interest in planting pecans is on the increase. I have turned under a fine crop of clover and am planting soy beans for summer crop.

J. A. KERNODLE.

Pecan Growing In Alabama

The Prattville, Ala., Progress says: There is no county in Alabama that is coming to the front faster in pecan growing. There are several thousand young trees that are beginning to bear each year and several thousand are planted each fall. If these trees will be taken care of and the pecans are sold at 30 cents per pound this county should soon sell \$50,000 of pecans annually.

Rains Reduce Alabama Prospects

Eufaula, Ala., June 10.—Pecan crop here promised about 50% but continued rains for past month caused much shedding. Think now 25% to 30% would be fair estimate.

CLIFF A. LOCKE

In Southern Alabama

Robertsdale, Ala., June 6.—Have heard several pecan growers in Baldwin county say they have promise of a good crop. My trees have set a fair crop. Schley seems to be putting on a rather light crop. Russell, Stuart and Pabst and a few other varieties are quite well filled.

MRS THOMAS A. BANNING.

Fowl River, Ala., June 12.—It is a little early to judge the crop, but would say there are certain varieties which seem to be bearing well this year and believe the crop, while considerably lighter than last year, will be about what it was in 1920. Have had no reports from other sections as yet.

W. A. WEAVER.

The Central Alabama Pecan Growers' Association has been incorporated at Selma, Ala., with Clifton Cabrera, of Kirkpatrick, president; G. R. Beers, of Tyler, as vice-president, and T. H. Miller, of Selma, as secretary and treasurer.

LOUISIANA

Flood Damage In Louisiana

Hammond, La., June 10.—The pecan prospects in Louisiana are only fair; about 70% in the northern section of the state and 60% in the southern. This is both for native seedlings and named varieties, with the advantage in favor of the varieties. Heavy spring rains interfered with pollination causing considerable June drop.

There has been a good deal of alarm produced by the floods of the Mississippi river overflowing the land in some sections to a depth of 8 to 10 feet. Some of the pecan orchards and native pecan trees in the flooded sections have stood in water for the past eight or ten weeks. It should be noted that the pecan trees can withstand this flooding without killing the trees while other cultivated trees would most probably die. The injury is only produced by the soil washing away in the formation of new channels. What effect the water will have on the pecan crop can not yet be determined as most of the land is still flooded. The probabilities are that the crop of pecans will be reduced where the trees have been flooded for a period of three months or more.

B. SZYMONIAK,
Horticulturist in Charge.

BLACK WALNUT

J. Nigra and Araucaria

Editor American Nut Journal:

Was rather sorry to note that at the recent meeting (Northern Nut Growers Association) so much time had been wasted, as I see it, on the recent fad or craze of planting the roadsides to black walnut. One must wait 75 years to get any money from the lumber. And he will have to invent more effective swear words than now exist to drive away thieves that live mostly in cities and steal, or appropriate, everything along the roadside where they can run their autos. Besides, it makes muddy roads in Illinois to shade them on the south side, although the gypsy horse trader, or stealer, will not object to shade trees for a camping place.

That the black walnut does injure other plants for long distance from the tree cannot be successfully denied.

If the J nigra is so valuable why do not its admirers plant their whole farms to black walnut and get rich in a few years? I think Dr. Morris voiced about the whole truth in the matter.

I own up that I am a little disappointed, for I have been trying for years to test the araucaria of Chile, S. A., here in Illinois. I had not read that the American Indians of Chile had made the pinons of this pine a main article of food for hundreds of years, and I longed to know all about it. Well, I don't know all about it yet; but, as I recently obtained a couple dozen of these pine nuts from Concepcion, Chile, I have found that they taste much like a raw navy bean and not like the pinons of New Mexico. They may be better when cooked in some manner. As some were sprouting, I have planted them and some of my descendants fifty years hence may develop a liking for them—as one must acquire a liking for the avocado, limberger cheese or castor oil.

BENJAMIN BUCKMAN.

Farmingdale, Ill.

GEORGIA

50% of Normal In S. E. Georgia

Blackshear, Ga., June 8.—It is apparent that the pecan crop in Georgia this year will be considerably under normal, and in this section, Southeast Georgia, we can't hope for better than 50% of normal.

No rain here during month of April and into May. Then excessive rains, continuing at present writing.

In view of the very large production last year, however, we are not disappointed with present showing. The average yield during a period of years gives us very satisfactory financial returns—in fact, larger returns per acre than anything else.

A. CLARKE SNEDEKER.

Too Early to Make Estimate

Albany, Ga., June 5.—It is too early to form an opinion as to the crop of pecans in Georgia. Later on nuts may begin to show higher up on the trees. Stuart looks now like a very poor crop, but later may show better.

WILLIAM P. BULLARD.

Barnwell Groves Sold

The famous Barnwell pecan groves in Mitchell county, which have been in litigation in the United States courts for several years, were sold May 17 at auction before the court house door at Camilla, Ga. Valued at approximately \$500,000 and carrying an indebtedness of \$400,000 the property was bid in by Joseph R. Nettles, a Columbia, S.

C., attorney, for \$200,000. The sale was made subject to confirmation by Judge S. H. Sibley at Savannah on May 24.

J. P. Mathews, of Columbia, began proceedings in 1920 to foreclose a \$400,000 mortgage on the property. He was resisted by the Barnwell interests, owners of the grove. On a number of technical grounds finally a second decree of foreclosure was secured before Judge Beverly D. Evans in 1921. It was appealed later to the United States court in Atlanta, before Judges Walker, King and Bryan, which confirmed Judge Evans' decision in January, 1922. The sale was held under this decree.

The property consists of 658 acres of bearing trees, ranging from 11 to 20 years old.

Average High Grade Crop Reported at Albany, Ga.

Albany, Ga., June 10.—The prospect for an average crop of pecans is excellent. The Schley has set a full crop. The Stuart is light, so is the Alley and Delmas. The Pabst has put on a fair crop. The second grade varieties like the Teche are full of young nuts. Frotscher trees which are ten years old and over have many nuts, but on the younger trees very few are to be found.

It's interesting to note in this connection, that the Schley has a very heavy crop of nuts set and the trees all are of a high dark green color. This makes the third year out of four that the Schley has set a heavy crop. This variety seems to be proving itself to be a most excellent one, as to production, to say nothing of its being the highest quality nut grown.

This section has had excessive rainfall lately and many fears have been expressed regarding the damage to the young nuts; but they seem to be unfounded and the nuts are practically all remaining on the trees, growing into large nuts to give us an average crop of a high grade.

A. M. PIPER.

Normal Crop at Glennville, Ga.

Glennville, Ga., June 9.—Through this immediate section the pecan nut crop is about normal.

From reports given at the Georgia-Florida Pecan Growers convention at Thomasville, the crop is shy in practically every section of the two states.

From what information I can get, I would think the pecan crop for this year to be far below normal.

J. M. BREWTON PECAN CO.
By B. C. Brewton.

Outlook at Cairo, Georgia

Cairo, Ga., June 10.—The present outlook is for a fairly good pecan crop in this section. Southwest Georgia had a good crop last season, though the quality was somewhat off, owing to very dry weather during

Gypsy Smith Buys Pecan Grove

Albany, Ga., June 10.—The Rev. Gypsy Smith, Jr., who conducted a remarkable series of evangelistic meetings in Albany during April, is to make Dougherty county his permanent winter home; at least his family will reside here while he is away holding services.

Mr. Smith has bought at Putney, nine miles south of Albany, a 21-acre pecan grove, and will build a home there. The grove was bought from Walter C. McKee, of Chicago, vice-president of the American Maganese Steel Company, through J. M. Patterson, of Putney.

If it relates to nut culture it should be in the AMERICAN NUT JOURNAL. Please send it in.

THE PECAN

Present Indications 50 Per Cent

Jacksonville, Fla., June 6.—I have just returned from a meeting of the Georgia-Florida Pecan Growers Association, and have also just returned from a short trip into South Carolina. My observation is that the crop for 1922 is going to be short. I would say from observations that the crop will not be more than a 50% yield of last year. I am glad to say, however, that the trees are looking remarkably well and are putting on a splendid growth.

H. H. SIMMONS.

At Tallahassee, Fla.

Tallahassee, Fla., June 15.—The nut crop in the Tallahassee section will apparently be about the same as last year. Some places here have a better crop and others not so good. We have had unusually heavy rains in the last 30 days and the deficiency in rainfall to date has been more than made up. We do not expect a crop of light nuts as we had last year.

J. SLATER WIGHT.

Drought Effects In Florida

Waldo, Fla., June 12.—The prospect for pecan yield in this section will not be over one-fourth of a normal crop. We had over two months drought during April and May which made the little pecans fall off. We are now having plenty of rain and the trees are showing up with a fine growth. The pecans that are on the trees will be extra large. The conditions named cover an area of 25 to 50 miles square or more.

T. S. McMANUS.

MISSISSIPPI

Rain Hurt Crop In Mississippi

Ocean Springs, June 6.—Winter conditions around here were very favorable and plenty of rain during the spring made the pecans come out with lots of blossoms of both kinds. But chiefly due to the heavy rain we had when the pecan blossoms were

ready for pollinization, the pecan crop in this section will probably not be more than 25 per cent of a full crop.

The Pabst and Van Deman trees suffered most. The Success, Russell and Stuart are the best.

The insect enemies have, so far, not been bad.

The pecan trees have put on a very large growth, so the indications for next year's crop are very favorable.

ALB. B. ACKANDER.

MEMBERSHIP DRIVE

National Nut Growers Association

\$2.00 Per Year—Limited Offer

By direction of the Executive Committee of the Association the Membership Fee has been reduced to \$2.00 for the limited period of the present Membership Drive.

REGULAR YEARLY RATES

Association Membership.....\$4.00
American Nut Journal..... 2.00

SPECIAL YEARLY RATES

Association Membership } \$3.25
American Nut Journal }

Address J. Lloyd Abbot, Sec'y.
Route 1, Spring Hill, Ala.

Trees Making Splendid Growth

Ocean Springs, May 30.—Crop prospects in this vicinity vary from 20 to 35 per cent at present. Up to this time there has been very light damage by insects. Trees are making a splendid growth.

THEO. BECHTEL.

Only Fair Crop

Canton, Miss., June 9.—Prospects in my pecan orchard are about as last year—only fair.

VIC TROLIO.

If it relates to nut culture it should be in the AMERICAN NUT JOURNAL. Please send it in.

TEXAS

Report From College Station

College Station, Tex., June 8.—I just returned from a ten days visit through the heart of the pecan section in West Texas. Judging from the conditions in that section, and the conditions here at the college, I predict that we are not going to have much over 50% of a pecan crop in Texas this year. There seems to be about 75% of the crop set. The case bearers have not started to work in West Texas, but I find that the first generation has destroyed about 25% of the crop in this section.

E. J. KYLE,

Dean, School of Agriculture.

Special Recognition of Carlots of Nuts

Transportation of pecans has grown to such an extent in Texas that the railroad commission has approved rates and rules governing the concentration of the nuts in carloads and less for the purpose of cleaning, shelling, storing, polishing or grading and reshipping in carload lots. The regulations are applicable on the I. & G. N., Katy, S. A. & A. P. and Southern Pacific lines.

Light Crop In Austin Section

Austin, Tex., June 6.—We believe that this part of Texas has as light pecan crop as it has ever had. This applies to both grafted trees and the wild seedlings.

F. T. RAMSEY & SON.

By F. T. Ramsey.

100 Acres of Roth-DeWitt Pecans

With the aid of County Agent, O. M. Lander, A. B. Roth, Cuero, Texas, is planting 100 acres with pecans, the seedlings to be budded from the newly-named Roth-DeWitt pecan tree, an offer of \$1,000 for which Mr. Roth has declined.

Early last month reports from some sections of Texas, where last year's yield was large, were to the effect that the nut case bearer was present in large numbers.

Spraying walnut trees with lead arsenate at a strength of 6 pounds to 50 gallons of water is an effective method of controlling the butternut curculio, says the Bureau of Entomology of the United States Department of Agriculture.

Budded and Grafted
HARDY NORTHERN NUT TREES
Best varieties, grown in natural nut soil. Send for catalog. Have your seedling nut trees topworked to these fine varieties.
Information and estimate on request.
INDIANA NUT NURSERY
Rockport. J. F. Wilkinson, Prop. Indiana

PECAN TREES

100,000 TREES—STANDARD VARIETIES
WE GROW NOTHING BUT PECAN TREES
HIGH QUALITY—SERVICE THE BEST
SIMPSON NURSERY CO., MONTICELLO, FLA

THIS SPACE
\$2.50 Per Month Under yearly Contract
Under less than yearly term:
\$2.80 Per Month

Texas Pecan Nursery Arp, Texas

THE PEOPLE THAT GROW
WELL-ROOTED PECAN TREES



NEW EDITION FREE

A practical guide showing how to bud pecans. Tells how to grow trees 12 inches in diameter by the end of the 8th year, which yielded 400 lbs. nuts per acre.

Trees, Nuts, Groves for sale direct without agent at attractive reduced prices
B. W. STONE, Thomasville, Ga.

FOR SALE

SIX HUNDRED (600) ACRES PECAN ORCHARDS, SEVEN TO NINE YEARS OLD, ALL BEARING. SACRIFICIAL PRICE.

J. W. GILLESPIE, ALBANY, GA.

SUCCESS

and other leading varieties. Also citrus
BECHTEL PECAN NURSERIES
Ocean Springs, Miss.

PECAN TREES

Plant them this year! Buy direct from nursery and save agent's profit. All standard varieties; quality and service the best. Write us for prices.

FLORIDA NURSERIES

W. W. Bassett, Prop., Monticello Fla.

AMERICAN NUT JOURNAL CHIEF EXPONENT OF AMERICAN NUT INDUSTRY

Of National Circulation

Covering Every Phase of Nut Culture

Subscription: - - \$2.00 Per Year
Advertising: - - \$2.80 Per Inch

Official Journal { National Nut Growers Association
Northern Nut Growers Association

AMERICAN FRUITS PUBLISHING COMPANY

39 State Street, Rochester, N. Y.

PERSIAN WALNUT

Temperature Extremes Injure Walnuts

Los Angeles, Cal., June 7.—That the damage done to the walnut crop by both high and low temperatures during the week of May 7 to 13 appears to be less than 5 per cent of the crop, was the statement of Sales Manager W. T. Webber and Chief Inspector H. C. Sharp of the California Walnut Growers' Association, after making a survey of the walnut belt. It was also declared that the damage by extreme temperatures was quite generally distributed over the entire southern part of the state. The outlook for the crop is good, and it is believed that the output of 16,000 tons in 1921 will be exceeded this year. A crop of 25,000 tons was forecast during April. At Saticoy, the damage was 15 per cent of the crop on account of heat, following a cold spell.

"Unusually cool weather on May 8, 9 and 10, with a sharp change to a hot wave on May 12 and 13, caused whatever injury is visible," said Mr. Webber. "The cool weather chilled the small and tender nuts, and the hot weather came on suddenly and shriveled them, causing them to drop off. It is gratifying to observe that the nuts which dropped were the smallest on the trees, and were the ones which likely would have run to the lowest grades had they remained on the trees to maturity. This natural thinning process has left the largest and finest nuts to mature. From all appearances, the walnut crop this year will be one of the heaviest ever produced in the state. It will be possible in about five weeks to estimate the probable tonnage with more accuracy."

The condition of walnuts in Los Angeles county is given as 85 per cent of normal by Horticultural Commissioner Ryan.

Planting 20,000 Walnut Trees

St. Paul, Minn., June 7.—Planting trees along Minnesota highways is well underway, following distribution of nearly 20,000 black walnuts, recently received by the State Forestry Department from Ohio. The walnuts are to be planted along highways in the southern part of the state, according to W. T. Cox, State Forester.

The northern section of the state insists that trees along the highways in the north are just as necessary as in the southern part of the state. The walnuts are not hardy enough, according to Mr. Cox to withstand the hard winters of that section of the state and it will be necessary for his department to decide on trees to be used in that section.

Applications for trees are coming from all sections of the state in such numbers that forestry department officials declare the campaign is virtually "running away with them." The supply of Ohio walnuts is all but exhausted, although, the original 20,000 to be used along highways are thought to be more than could be planted this year.

Walnuts For the South

Referring to Dr. Robert T. Morris' use of paraffin in grafting, the Macon, Ga., Telegraph says:

"Here in the South we will likely continue to make summer budding our principal method of pecan propagation, though grafting with paraffin according to Dr. Morris' discovery and instructions opens up an inviting field for spring and early summer top-working of seedling pecans and hickories. The use of paraffin should also insure practically a hundred per cent success in budding. While the South has a monopoly on the fin-

est pecans, no doubt thin-shell black walnuts and English walnuts on black walnut stock will prove attractive and profitable for us."

Carlisle Thorpe in China

That the importation of Manchurian walnuts is assuming such proportions that it will materially affect the interests of California growers was the consensus of opinion at the meeting of directors of the California Walnut Growers association. With a view to making an investigation as to the walnut industry in Manchuria, Carlisle Thorpe, manager of the state association has gone to Manchuria.

It was brought out at the Los Angeles meeting that of the approximately 54,000 tons of walnuts marketed in the United States last year California produced about 18,000 tons, while 36,000 tons were imported, half of the imported product coming from Manchuria.

Mr. Thorpe, who expects to be absent about four months, will return home by way of Europe, where he will make an investigation of the walnut industry in France and Italy.

Walnut Growers Field Day

At a recent meeting of the executive committee of the Walnut Growers' Department of the Los Angeles County Farm Bureau at which representatives from Orange, Ventura and Santa Barbara counties were present, it was decided to hold the second annual walnut growers field day at Santa Barbara on Saturday, September 2. A special program committee was appointed.

According to the Los Angeles Herald nearly 43,000,000 pounds of walnuts have been imported into this country within a period of five months. "This," says Carlisle Thorpe, "is the largest quantity ever imported during an entire year, and is more than the entire crop produced in California during 1921." The people of California express much gratification because of the duties which have been placed on walnuts by the Finance Committee of the U. S. Senate.

Officers of the Santa Clara County Walnut Growers' association were re-elected at the annual meeting of the association at Santa Clara as follows: P. J. Martin, president; George C. Payne, vice-president, and C. J. Parks, secretary-treasurer. The following were named directors: J. A. Conner, F. G. Wool, D. W. Luther and H. W. Ward.

Walnut Field Day

The annual field day of the Walnut Growers' association for Southern California will be held at Goleta, Cal., on September 1 and 2 of this year. A thousand visitors are expected.

Early maturity in young walnut trees can be promoted and injury from frost avoided by withholding irrigation water in late summer, states L. E. Batchelor, professor of orchard management in the University of California.

In South Carolina

Fort Mill, S. C., June 6.—The pecan crop in my district is only fair. Have had entirely too much rain which prevented proper pollination. I think that applies to the entire state generally. The trees are thrifty however, where they have had proper attention.

B. M. LEE.

State Vice-President.

THE ALMOND

Reorganized Almond Exchange

San Francisco, Cal., June 12.—Selling policies and trade practices of the California Almond Growers Exchange will remain unchanged and unaffected by reorganization of the Exchange on a five-year crop pooling agreement recently completed between the almond growers of California and the Exchange. The reorganization meeting of the Exchange was held in San Francisco on June 1st.

It was disclosed at the meeting that twenty five hundred commercial producers of almonds had signed the five-year agreement to replace the old seasonal agreement between growers and their co-operative. Under these twenty-five hundred agreements the Exchange will handle a greater volume of the almond tonnage of the state than ever in its history and has been put in a position to make plans for sales and market development.

The growers continued in office the old officers and board of directors, with T. C. Tucker as manager. The meeting instructed the manager to open the Exchange books for orders for the 1922 crop immediately and brokers have been notified throughout the country to that effect.

The State Department of Agriculture has estimated this year's almond crop as the heaviest in the history of the state barring unforeseen crop contingencies. According to reports to the Exchange from the various almond growing districts of California, all varieties of almonds show an unblemished high quality.

Immediately following the opening of the Exchange books, orders from Eastern buyers began to flow into the Exchange freely and it is predicted that the Exchange will do a greater business in 1922 than it ever has.

"Our selling policies will remain as they have been in the past," said Manager Tucker—"fair both to the buyer and grower and strictly in accord with market conditions."

Business men and bankers familiar with the Almond Growers Exchange and the meaning of the five year crop pooling agreement, have congratulated the officers of the Exchange on the success of their reorganization as it puts the Exchange on a solid business basis. The five year agreement guarantees the trade that the Exchange will be in business from year to year and will always control at least the present tonnage and without doubt increased volume as production of California almonds rises and additional growers join the organization.

The five-year crop pooling agreement means as much to the buyer as it does to the grower. The Exchange is in a better position than it was under the old loose agreements and will know at an earlier date than formerly, just what tonnage it will have to market each year.

The officers of the Exchange are requesting brokers and the trade to send in orders for the 1922 crop as soon as possible, as this will permit the Exchange to function to the best interests of the buyers. Buyers placing their requirements at this time on condition contract form and confirming same in full as entered, will be entitled to the one cent per pound premium and guarantee against price decline until January 1, 1923.

If it relates to nut culture it should be in the AMERICAN NUT JOURNAL. Please send it in.

FOR SALE

Eighty acres on Old Spanish Trail, Southern Alabama, containing one of the best bearing groves of 900 Pecan trees in the state.

Has had personal care of owner for past 16 years. For particulars, address
ROBERTSDALE,
LONGACRES PECAN PLANTATION, ALABAMA, or
1632 MARQUETTE BLDG., CHICAGO, ILL.

American Fruits Company's Library Opportunities

PRACTICAL BOOKS ON HORTICULTURE, NUT GROWING, NURSERY PRACTICE

Any of the following books will be sent on receipt of price by AMERICAN FRUITS PUB'G CO.,
123-125 Ellwanger & Barry Bldg., ROCHESTER, N. Y. Prices subject to change.

American Apple Orchard By F. A. Waugh.....	\$1.90	Insect Book—Dr. L. O. Howard... 6.30	Parsons on the Rose—Parsons..... 1.75
American Fruit Culturist By John J. Thomas.....	2.65	Insects and Insecticides—Weed.... 2.15	Peach Culture—J. A. Fulton..... 1.65
American Fruit Farm—F. N. Thorpe	2.65	Insect Pests of Farm, Orchard and Garden—Sanderson and Peairs.. 4.65	Peach Growing—By H. P. Gould... 2.65
American Grape Culture—Munson.. 2.65		Irrigation Farming—L. M. Wilcox. 2.40	Pear Culture for Profit—Quinn.... 1.35
American Grape Growing and Wine Making—George Husmann 2.15		Irrigation for the Orchard—Stewart 1.75	Picturesque Gardens—Henderson.. 2.25
American Horticultural Manual By Budd-Hansen, two vols..... 3.15		Land Drainage—Joseph H. Jeffrey 2.15	Plant Breeding—By Dr. L. H. Bailey 3.40
American Peach Orchard—Waugh. 1.90		Landscape Gardening—Art of Land- scape Architecture—Parsons.... 3.65	Plant Propagation: Greenhouse and Nursery Practice—M. G. Kains 2.40
Bulbs and Tuberous-Rooted Plants. 2.15		Landscape Gardening—Downing's Famous Work—10th Edition —Revised by Waugh..... 6.00	Plant Physiology—B. M. Duggar... 3.00
Bush Fruits—By F. W. Card..... 3.15		Landscape Gardening—House and Garden's Book of Gardens, 9 1/2 x 12 1/2, 400 Illustrations..... 5.15	Practical Forestry—A. S. Fuller... 2.15
California Fruits and How to Grow Them—E. J. Wickson, A. M.... 4.15		Landscape Gardening, Kemp— Revised by F. A. Waugh..... 2.15	Practical Fruit Grower—Maynard.. 1.00
Citrus Fruits—J. E. Coit..... 3.40		Landscape Gardening—Maynard.... 2.65	Principles of Agriculture—Bailey.. 2.00
Commercial Apple Industry of North America	3.65	Landscape Gardening—The Small Place—By Elsa Rehmann..... 3.65	Principles of Fruit Growing—Bailey 2.65
Cyclopedia of Agriculture By E. V. Wilcox-C. B. Smith... 3.75		Landscape Gardening—The Small Place—By Elsa Rehmann..... 3.65	Principles of Pruning—Kains 2.65
Dwarf Fruit Trees—Waugh..... 1.00		Landscape Gardening—The Small Place—By Elsa Rehmann..... 3.65	Pruning Manual—By L. H. Bailey.. 2.65
Farm Bureau Movement—O. M. Kile 2.15		Landscape Gardening—The Small Place—By Elsa Rehmann..... 3.65	Putnam's Garden Hand Book..... 2.00
Fertilizers and Crops By Dr. L. L. Van Slyke..... 3.40		Landscape Gardening—The Small Place—By Elsa Rehmann..... 3.65	Quince Culture—W. W. Meech.... 1.35
Fertilizers—Edward B. Voorhees... 2.65		Landscape Gardening—The Small Place—By Elsa Rehmann..... 3.65	Roses—How To Grow—Robert Pyle 1.35
Field Notes on Apple Culture By Dr. L. H. Bailey..... .90		Landscape Gardening—The Small Place—By Elsa Rehmann..... 3.65	Rose—H. B. Ellwanger..... 1.40
First Principles of Soil Fertility By Alfred Vivian..... 1.50		Landscape Gardening—The Small Place—By Elsa Rehmann..... 3.65	Sales Promotion By Mail..... 2.15
Forcing Book—By Dr. L. H. Bailey... 2.15		Landscape Gardening—The Small Place—By Elsa Rehmann..... 3.65	Small Fruit Culturist—A. S. Fuller. 1.75
Fruit Growing in Arid Regions.... 2.75		Landscape Gardening—The Small Place—By Elsa Rehmann..... 3.65	Soils—E. W. Hilgard..... 4.25
Fruit Garden—P. Barry..... 2.15		Landscape Gardening—The Small Place—By Elsa Rehmann..... 3.65	Soils—Lyon-Fippin-Buckman 3.40
Fruit Harvesting, Marketing—Waugh 1.90		Landscape Gardening—The Small Place—By Elsa Rehmann..... 3.65	Soils—F. H. King..... 2.40
Fruit Insects—Crosby..... 3.90		Landscape Gardening—The Small Place—By Elsa Rehmann..... 3.65	Soils—By Charles W. Burkett..... 1.90
Fumigation Methods	1.90	Landscape Gardening—The Small Place—By Elsa Rehmann..... 3.65	Spraying Crops—C. M. Weed..... 1.00
Gardening for Pleasure—Henderson 2.15		Landscape Gardening—The Small Place—By Elsa Rehmann..... 3.65	Standard Cyclopedia of Horticulture Edited by L. H. Bailey. In six volumes. 3,600 pages. 4,000 text engravings. 96 sepia half- tones. 500 collaborators. May be had on installment payments 40 00
Gardening for Profit—Henderson... 2.15		Landscape Gardening—The Small Place—By Elsa Rehmann..... 3.65	Strawberry in North America—S. W. Fletcher
Grape Growers Guide—Chorlton... 1.65		Landscape Gardening—The Small Place—By Elsa Rehmann..... 3.65	1.90
Grape Culturist—A. S. Fuller..... 2.15		Landscape Gardening—The Small Place—By Elsa Rehmann..... 3.65	Strawberry Growing—S. W. Fletcher 2.40
Greenhouse Construction—Taft ... 2.40		Landscape Gardening—The Small Place—By Elsa Rehmann..... 3.65	Success in the Suburbs—John R. McMahon
Greenhouse Management—Taft..... 2.40		Landscape Gardening—The Small Place—By Elsa Rehmann..... 3.65	2.15
Hedges, Windbreaks, Shelters..... 1.00		Landscape Gardening—The Small Place—By Elsa Rehmann..... 3.65	Successful Fruit Culture By Samuel T. Maynard..... 1.75
How To Grow Roses—Robert Pyle. 1.35		Landscape Gardening—The Small Place—By Elsa Rehmann..... 3.65	Surgeon's Philosophy—Dr. R. T. Morris
Injurious Insects—F. L. Washburn 2.65		Landscape Gardening—The Small Place—By Elsa Rehmann..... 3.65	3.15
Insects of Economic Importance— Herrick	2.15	Landscape Gardening—The Small Place—By Elsa Rehmann..... 3.65	Systematic Pomology—Waugh.... 1.90
		Landscape Gardening—The Small Place—By Elsa Rehmann..... 3.65	Ten Acres Enough—I. P. Roberts.. 1.75

A paper which gives the best value for the money to the reader will give the best value to the advertiser as well. I don't think there is any argument about the soundness of this view.—H. Dumont, Chicago, Ill., in Printer's Ink.

International Exhibit Proposed

An International Fruit Exposition is scheduled for the Chicago Coliseum Nov. 25-Dec. 2. It has been suggested that an International Nut Exhibit be made in connection therewith. The manager of the Exposition, Glenn G. Hayes, says: "It is believed that growers, dealers, commercial interests and consumers would greatly benefit by a visual demonstration and promoting of a national interest in the crop. In this metropolitan city of 3,000,000 inhabitants, the nut growers of the country should be able to exhibit their products on a scale heretofore never attempted. It should be a huge success

from the standpoint of increased consumption and buying of nuts."

What do our readers think of the plan?

Nut Trees For Highways

The Minnesota forestry department in the capitol at St. Paul is offering nut trees for planting on the highways of Minnesota. The planting of these state highways with shade, ornamental or fruit trees should be begun at once. If the road is properly made so that it drains well and the trees are set 50 or 60 feet apart they will not harm the roads in the least and will add much to the pleasure of driving along them in the future.—LeRoy Cady, associate professor of horticulture, University Farm, St. Paul.

New Louisiana Station for Nut Work

There has been established in Louisiana a new Fruit and Truck Expt. Sta., in the strawberry section near Hammond, La. We will specialize with the strawberry but will work with nuts as well as with other fruits and also truck crops.

B. SZYMONIAK,
Horticulturist in Charge.

Hammond, La.

The Kinchafoonee Pecan Company has been incorporated in Dougherty county, Georgia, by W. L. Crawford and L. L. Feree.

M. E. Hays, pecan specialist of the A & M. College of Texas, has been busy for months, demonstrating pecan budding at various Texas points. There is much interest in the production of improved pecans.

THIS SPACE
\$2.50 Per Month Under Yearly Contract
Including Publication in both AMERICAN NURSERYMAN and AMERICAN NURSERY TRADE BULLETIN.
One Month: \$2.80 in both.

O. A. ROSS PAPER SHELL PECAN GROVE EXPERT

Groves appraised. Expert Supervision. Nut crops harvested and shipped.
118 Front Street, Albany, Georgia

CONSULTING TROPICAL HORTICULTURIST and TREE EXPERT

HARVEY C. STILES

COLUMBIA, TEXAS

Specializing in Pecans, Grapefruit, Avocados, and Landscape Development. Long experienced expert for—and present active director of—many such large projects throughout tropics and semi-tropics. Examinations, Reports, Plans, Specifications and Estimates. Correspondence suggested.

BUDED and GRAFTED Nut Trees

Start right with my hardy Pennsylvania grown trees and be assured of success. Attractive Catalogue Free.

I have this season a fine lot of stake trained Pecan, English Walnut, Black Walnut and Persimmon trees budded on root pruned transplanted stocks, that will please you and that will transplant easily and safely. Write for catalogue.

J. F. JONES, The Nut Specialist
LANCASTER, PA.

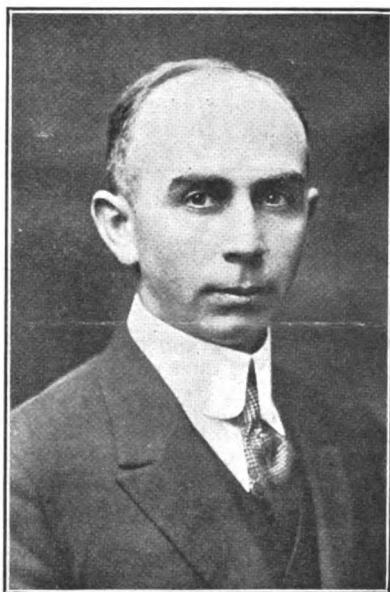
American Nut Journal

**DEVOTED TO NUT GROWING INTERESTS
GENERALLY THROUGHOUT THE AMERICAS**

Vol. XVII, No. 1

JULY, 1922

Per Copy 20c.



CHARLES A. SIMPSON, Monticello, Fla.

**President National Nut Growers' Association
President Southern Nurserymen's Association
President S. E. Pecan Nurserymen's Assn.
President Monticello Chamber of Commerce
Former Pres. Ga.-Fla. Pecan Growers' Assn.
Former City Councilman of Monticello
Director of the Bank of Monticello**

39 STATE ST.



ROCHESTER, N. Y.

American Fruits Publishing Co.

THE NORTHERN NUT GROWERS' ASSOCIATION

THIS Association comprises among its members those most skilled in the propagation of nut trees and those most advanced in nut growing. It also comprises among its members many who are not experts, and who become members for the purpose of learning. It welcomes to membership both the expert and the learner. It is not organized for profit, its aim being the acquisition and dissemination of knowledge of nut trees and nut growing. A number of its members have expended much time and considerable money in experimental work, and have given the results to the Association. This work is still going on.

The proper use of nuts is not generally understood. They are usually used as a delicacy, whereas they are a most concentrated food. Careful experiments have shown that they will successfully replace meat in the diet even of such animals as wolves and tigers. The food value of nuts from an acre of ground is many times that of the beef that can be produced on the same ground, and nut growing seems destined to solve the problem of the diminishing supply of meat and the increasing demand for it. Probably the most practical use of nuts is to partially replace meat rather than to replace it altogether.

In Europe, land with bearing nut trees on it brings a higher rental than the best cultivated land, and the same will be true in America when the value of nut tree crops is more generally recognized. In certain sections of the South, pecan trees bearing fine nuts have enormously enhanced the value of the land on which they stand, and it is only a question of a few years when this will be true in other sections of the country. It will be so when the orchards of nut trees, now being planted, begin to bear. It is confidently believed by the Association that nothing can be grown which will give as great returns, for the labor expended on them, as bearing nut trees.

Nut trees will not come true from seed any more than fruit trees will. A fine nut, when planted, will almost certainly cause a tree to grow which will bear very inferior nuts, but this same tree will bear fine nuts if it is grafted or budded with scions or buds from a tree bearing fine nuts. While fruit trees have been successfully grafted and budded for many years, it is only within a few years that it was possible to do this with nut trees. This can now be done quite successfully, however, and the methods of doing it are being steadily improved. Young trees, grafted or budded to the fine varieties of nuts that have been discovered can now be procured from a few nurserymen making a specialty of growing them. The Association has a list of such nurserymen which will be mailed free on request.

While fine varieties of northern pecans, hickories, black walnuts, etc., have been discovered and are being propagated, it is doubtless true that all the fine nut trees in the country have not come to the attention of the Association and hence it is seeking each fall to learn of other meritorious nuts, and, to further this, prizes have been offered for northern pecans, hickories, black walnuts, butternuts, hazels, English walnuts and Japan walnuts.

It is perhaps well to state here that nut growing, being the newest branch of agriculture, at least in America, is one about which everything is not known, and the best varieties of each particular kind of nut for each section is something that has not been definitely worked out. It is being done, however, and progress in growing nut bearing trees and shrubs is so rapid that a person whose knowledge is two or three years back is behind the times. This is in marked contrast with other branches of agriculture where good cultural methods and varieties were worked out years ago. In the matter of nut growing almost the only way to get the latest information is by reading the American Nut Journal and through the Secretary's office. There is no place where up-to-date information on nut growing is to be found as it is in the Secretary's office, and his services are free to members.

Even though the facts require it to be stated that our detailed knowledge of nut growing is not as comprehensive as that on most other agricultural subjects, yet it must not be understood that it is not sufficient so that planting nut trees must be regarded as so difficult that few can succeed. Anyone, who plants the right kind of nut trees, in good soil, and gives them proper attention till they become established will have something that will not only be a source of pleasure but a source of constantly increasing income. The English walnut, hazel and almond orchards of Europe and California and the pecan orchards of Southern United States have amply demonstrated this for these sections, and the nut trees planted in the north which are just coming into bearing have convinced careful observers that the fine nut trees in the north will do likewise. Therefore the Association wishes to emphasize that the important thing to do now is to **PLANT THE FINE VARIETIES OF NUT TREES THAT WE NOW HAVE.**

Membership in the Northern Nut Growers' Association is as noted below:
 Membership for one year, including copy of Current Report.....\$2.00
 Membership for one year, including copy of the Current Report and subscription to the American Nut Journal for one year, if sent to an address in the United States 3.25
 Membership for one year, including copy of the Current Report and subscription to the American Nut Journal for one year, if sent to an address in Canada or abroad 3.75
 The Current Report is the 10th. Copies of the 2d, 3d, 4th, 5th, 6th, 7th and 8th can be supplied at 50c each to members, or \$1.00 each to non-members. The 9th report has not yet been issued.

The American Nut Journal is the only paper devoted exclusively to nuts and nut growing. Subscription to it, without membership in the Association, is \$2.00 per year or \$2.50 if sent to Canada or abroad.

WILLARD G. BIXBY, Treasurer, 32 Grand Ave., Baldwin, Nassau Co., N. Y.

Pecan Dieback

Pecan dieback is a fungous disease which is recognized by the presence of minute, black crusts embedded in somewhat elongated cracks or ruptures in the bark of the diseased limbs and dead twigs. Toward the base of the diseased twig the bark often has a water-soaked, waxy appearance, and there is usually a definite margin between the infected and healthy tissue.

Numerous young shoots often start out farther back on the branches which have been partly killed, and as the disease spreads these shoots become infected and

later die. From these clusters of short branches die-back is often mistaken for rosette. However, in the case of die-back there is no deformity or crumbling of the leaves, which is one of the common symptoms associated with rosette.

Dieback may be controlled by pruning out the dead wood and burning it, according to the Florida Experiment Station. The disease is not easily recognized when the trees are in the dormant stage, so it is advisable to go over the trees during the summer and mark all which show any signs of dieback. In this way the grower is able in

Good-Bye Wax

No More Wax to be Used in Budding Pecans
By F. T. RAMSEY, Austin, Texas

I have rarely written "just to hear it roar" preferring to write some fact or facts of both interest and value to those who read after me.

I do not think I have ever written an article of more value than this one will be or should be.

Since we commenced grafting and budding pecans twenty years ago I have told so many people how to make grafting wax that in my sleep I have said beeswax, rosin and tallow—or rosin and beeswax and linseed oil or warm beeswax or warm paraffin, or beeswax and rosin and alcohol. One time we used wood alcohol.

On every one of these the hot sun drives the grease out and it runs exactly where it should not run and kills the grafts and buds.

In one spring we paid the budders and grafters about three thousand dollars for work in one patch of pecans. About five per cent lived. Is it any wonder Nurserymen get old prematurely?

Some of our men are great on doing things a different way. We sent four men, with boys to tie, to bud a few hundred scattering wild pecans on a little farm we have up in the cedar brake. Two of them used wax, and not one bud lived, the other two used no wax and I cannot find a dead bud in the two hundred they put in. Both lots of the men used both raffia and cotton cord for tying. Perhaps half of the living buds were tied with raffia bark and a pleasant phase of the work was to see that the fast growing trees had bursted the raffia on every bud except one. Every bud will grow out but might not be blown off by the wind so easily if the string (or raffia) had stayed on longer, so I had the balance of the trees tied closely with raffia and then the strong cord wrapped a few times over it.

This was done by an inexperienced man both the budding and the tying and every bud seems surely alive. We will not cut off the tops and limbs above the buds until next February. Half inch strips of strong cloth are good for wrapping buds.

All these buds were put in cold storage at about thirty degrees in January and February. We have used some fresh cut buds of last year's growth with a very small per cent of "success."

Wax may still be necessary with fresh cut buds, but it is not necessary in using cold storage buds. The waxed buds that died, had the wood left in, largely, and that may have helped to make the die unanimous.

May I never let slip so good a chance to say that every farmer should plant grafted pecans in wide rows 50 to 100 feet apart or else plant common plump nuts, same distance over all his farm, both valley land and up-land. Farm crops can be raised between the rows for many years.

If nuts are planted the weaker trees should be destroyed and the stronger ones left for grafting 30 to 40 feet apart. They can be grafted or budded when two years old and sometimes some sorts will bear some nuts two years later.

fall to prune out quickly and thoroughly all the diseased wood.

F. F. Rockwell, horticultural editor of Farm and Fireside, is strongly advocating the planting of nut trees on home grounds.

Just mention AMERICAN NUT JOURNAL.

AMERICAN NUT JOURNAL --- JULY, 1922

EDITORIAL DEPARTMENT—Communications on any subject connected with Nut Growing and Distribution are cordially invited by the editor; also articles on this subject. We shall be pleased to reproduce photographs of trees of interest, methods and scenes connected with the Nut Industry; portraits of individuals, etc. Suggestions are cordially welcomed.

ADVERTISING—Advertising forms close on the 10th of each month. If proofs are wanted, copy should be in hand on the 1st.

Advertising rate: 20 cents per agate line; \$2.50 per column inch for any amount of space.

Advertisements that do not represent reliable concerns will not be accepted.

SUBSCRIPTIONS—The "American Nut Journal" will be sent to any address in the United States for \$2.00 a year; to Canada or abroad for \$2.50 a year. Three years: In United States, \$6.00; Canada, \$6.50.

Add ten cents for exchange unless bank draft, express or postal money order is used.

WHAT THIS JOURNAL STANDS FOR—Reliable information on all phases of the Nut Industry. It is for the advancement of Nut Growing in general; it is in no way confined to the interest of a particular kind of nuts, nor of a particular section. It is broad in scope and absolutely independent. The aim of "The American Nut Journal" is to stimulate thousands of persons into developing interest in one of the greatest food supplies of the future—to line the roadsides and fill the waste places with trees of a sort which yield dollars worth of fruit every year instead of the mere bunches of leaves resulting from present shade and ornamental planting. At the same time it will record the progress of the industry, the latest descriptions in the note book of the biologist and plant physiologist, the rapidly expanding knowledge of methods, the increasing acreage, and in short the news as it develops of an industry whose importance is recognized by an increasing number of persons in all sections.

Entered as second-class mail matter June 6, 1914, at the post office at Rochester, N. Y., under the Act of March 3, 1879.

AMERICAN FRUITS PUBLISHING COMPANY, Inc.

Ralph T. Olcott, Editor and Manager

121-123-125 Ellwanger & Barry Bldg., Rochester, N. Y.

Classified Business Announcements In This Issue.

Bassett, W. W. Pecan Trees	10	Nut Information Special Topics	3
Bechtel's Pecan Nurseries... Grafted Pecan Trees	10	Nuts as Staple Food..... Dr. J. H. Kellogg.....	3
Florida Nurseries Pecan Trees	10	"Nut Trees for the North". Expert Advice	3
Indiana Nut Nursery..... Northern Pecan Trees	10	Ross, O. A..... Pecan Grove Expert	12
Jones, J. F. Grafted Pecan Trees.....	12	Simpson Nursery Co..... Hale's Hickory	10
Lancaster Nut Nurseries... Northern Nut Trees	12	Stiles, Harvey C..... Tree Expert	12
Logical Market Place..... For Selling Nuts.....	9	Stone, B. W. Pecan Trees, Nuts, Groves.....	10
Northern Nuts Sources Wanted	12	Texas Pecan Nursery Budded Pecan Trees	10
"Nut Growing" New Book	8	Wanted Names of Grove Owners.....	12
McKinnon, J. T.	10	Wilkinson, J. F. Grafted Pecan Trees	10

IMPORTS OF NUTS INTO THE UNITED STATES, FOR CONSUMPTION, DURING THE LAST THIRTEEN YEARS

(Compiled by Bureau of Commerce and Navigation, Department of Commerce, Especially for the "American Nut Journal.")

KIND	1907	1908	1909	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919
Almonds—not shelled.....lbs.	5,714,207	8,515,688	2,120,632	6,810,056	3,762,654	5,242,563	2,363,860	5,501,059	4,684,598	2,368,369	4,901,168	6,149,374	7,482,588
Shelled.....lbs.	8,717,952	8,556,162	8,538,054	10,495,750	12,160,636	11,692,988	12,655,057	13,896,621	12,168,153	13,210,668	19,160,258	21,544,757	28,007,908
Apricots and peach kernels lbs.				27,854	13,551	7,939	18,769	18,572	67,164	11,926	250,075		
Coconuts in the shell... Dollars	\$1,349,380	\$1,439,589	\$1,246,463	\$1,298,970	\$1,704,262	\$2,012,203	\$1,792,713	\$2,150,500	\$1,593,666	\$1,891,328	\$2,583,560	\$2,490,388	\$4,053,262
Coconut Meat broken or Copra not shredded, desiccated or prepared.....lbs.	7,064,559	14,121,576	23,742,518	20,830,539	38,081,984	61,505,787	34,283,592	44,459,158	88,690,382	108,507,765	247,043,127	430,649,332	268,637,781
Desiccated, shredded, cut or similarly prepared.....lbs.	3,476,698	5,584,652	5,461,602	5,985,308	6,661,850	5,396,465	6,826,095	9,307,924	5,866,806	7,947,380	10,491,796	20,269,909	29,637,674
Cream and Brazil.....bu.	280,633	310,418	409,644	461,496	277,679	21,601,008	11,933,139	11,431,531	21,483,319	12,489,217	16,233,023	11,282,088	43,076,268
Filberts—not shelled.....lbs.	9,960,280	8,997,246	7,365,837	10,026,961	10,084,987	8,375,890	8,586,278	10,836,072	10,922,248	10,003,552	16,468,547	7,432,524	16,747,349
Shelled.....lbs.	1,553,332	1,343,594	1,384,689	1,413,391	2,332,606	1,368,835	1,450,620	1,798,147	1,722,705	1,259,540	2,280,787	4,245,863	3,778,906
Marrons, crude.....lbs.				10,270,398	9,968,879	14,845,345	10,157,321	18,849,257	12,549,959	15,754,796	6,275,030		5,021,146
Olive nuts, ground.....Dollars	\$1,016	\$1,027	\$580	\$478	\$236	\$206	\$342	\$385	\$112	\$25	\$120		
Palm and Palm Nut Kernels "	\$3,350	\$2,250	\$2,752	\$6,907	\$5,744	\$7,970	\$4,872	23,127	31,900	1,104,885	626,435	16,905,313	5,610,056
Peanuts or Ground Beans.....													
Unshelled.....lbs.	10,432,828	6,498,202	7,326,371	11,297,172	11,055,823	12,660,433	12,140,612	17,298,778	14,075,387	9,623,411	7,710,082	1,970,797	5,067,354
Shelled.....lbs.	4,780,054	1,775,946	1,302,919	16,089,919	7,821,505	3,127,829	7,823,173	21,819,101	11,695,507	19,739,888	27,548,928	67,746,831	24,179,687
Pecans.....lbs.		1,118,071	1,480,289	3,349,460	2,333,037	2,607,227	1,803,434	2,621,161	2,032,539	1,265,382	4,076,933		
Walnuts—not shelled.....lbs.	23,036,646	21,427,853	17,432,885	23,269,974	21,146,116	22,208,845	16,363,046	16,134,211	20,988,326	22,610,418	17,177,992	3,804,003	21,235,078
Shelled.....lbs.	7,199,988	7,098,958	8,781,908	10,960,988	11,244,054	10,713,286	10,093,622	11,636,053	10,552,956	13,445,790	12,257,593	9,707,401	10,260,890
All other shelled or unshelled, not specially listed.....lbs.	10,598,186	10,441,327	9,938,337	3,584,544	2,962,663	3,050,989	3,600,056	7,426,313	3,272,492	2,772,589	2,769,634		
Total of nuts imported Dollars	\$9,315,891	\$9,563,742	\$8,549,997	\$12,775,196	\$14,265,572	\$15,626,485	\$13,508,307	\$19,815,713	\$16,865,244	\$20,594,434	\$33,667,898	\$49,930,283	57,499,04

a—pounds.

Nut Culture Information

Reprint folders on topic discussed in American Nut Journal. 10 Cents Each

Grafting and Budding the Walnut—U. S. Dept. Agriculture.
Pecan Areas of the United States—W. P. Reed.
Walnut Trees For New England—Dr. Robert T. Morris.
Some Walnut Varieties—Dr. L. D. Batchelor.
Chip Buds For Nut Trees—Charles L. Edwards.
Grafting, Budding, Topworking—Dr. W. C. Deming.
Breeding Chestnuts for Disease Control—U. S. Dept. Agr.
Advent of Nuts as Staple Food—Dr. J. H. Kellogg.
Pecans As An Investment—Herman C. Locke.
Underworking Nut Trees—Charles L. Edwards.
The Ubiquitous Black Walnut—T. P. Littlepage.
Average Yield of Pecan Orchard in S. W. Georgia.
Value of Nuts As Food—Dr. W. C. Deming.
Improved Black Walnut a Good Investment—Henry Stabler.
Status of Pecan Industry—C. A. Reed, U. S. Nut Culturist.
Sources of Supply of Hazel Nuts—Bulletin Imperial Institute.
Top-Grafting the Walnut Tree—Ferd Groner.
Black Walnut As a Meat Producer—Henry Stabler.

Outline of Northern Nut Culture Activity—Dr. W. C. Deming.
Establishing the Filbert Grove—George Dorris.
Top-Working Northern Pecan Trees—J. F. Wilkinson.
Nut Trees for Highways and Public Places—W. S. Linton.
American Nut Culture—24-page Pamphlet Survey.
East Texans Reap Fortunes on Pecans.
Hazel Blight—Dr. Robert T. Morris.
American Nut Industry—C. A. Reed, Nut Culturist.
What Nuts to Plant in Northern States.
Pecan Rosette; Practical Treatment—W. A. Weaver.
English Walnut: Where To Plant It.
Nut Tree Grafting by an Easy Method—Dr. Robert T. Morris.
Purchase of Chestnut Tree With Reference to Blight—G. F. Gravatt.
Quick Results in Pollenizing Pecans—E. E. Risien.
Nut Trees to Reduce Food Costs—Chas. Lathrop Pack.
How To Guard Against Faulty Nuts—Harvey C. Stiles.
The Romance of the Pinon Nut Industry in New Mexico
Soil Fertility; Fertilizer Problems in Pecan Culture—J. J. Skinner, U. S. Department Agriculture.
The Future of the American Grown Filbert—Richard H. Turk.

AMERICAN FRUITS PUBLISHING CO., 39 State Street, Rochester, N. Y.

CONVENTION PLANS FOR NORTHERN NUT GROWERS ASSOCIATION

By W. C. DEMING, Secretary,
Hartford, Conn.

Less than two months away is appointed the Thirteenth Annual Convention of the Northern Nut Growers' Association at Rochester, N. Y., on September seventh and eighth.

Besides the privilege and pleasure of meeting those members who always come to the conventions, no matter what the distance, members who live so near that distance is no excuse should be told of the remarkable opportunities for seeing nut trees of celebrity that this convention will offer.

First, there will be the filbert Nursery of our president, James S. McGlennon, under the technical management of Conrad Voltertsen, where we expect to see thousands of filberts in great variety and in full bearing. This alone should be well worth the visit, since it is the main source of filberts in the East and the greatest object lesson in the possibilities of filbert culture.

In the public parks of Rochester are some unusual nut trees, including a fine specimen of the Byzantine tree hazel and the Laney parent hybrid hickory, which is being propagated as a valuable nut.

Round about Rochester are hundreds, perhaps thousands, of Persian (English) walnut trees. The best known of these are the much advertised Pomeroy's at Lockport, the Holden trees at Hilton and the unique eastern grove of Adelbert Thomson at East Avon, containing 225 large bearing trees. The local committee will arrange trips to all of these and many other unusual and remarkable nut trees.

Rochester is the center of the greatest Nursery and fruit growing section of the East.

Niagara Falls can be reached by train or trolley in a short time.

It is still too early to say much about the indoor programme. Dr. Morris will be on hand, as usual with something new and striking. Franklin Moon, Dean of the State College of Forestry at Syracuse, has promised an address on growing nut trees to produce both food and lumber. Mr. Riehl may possibly be on hand, but in any case has promised a communication on growing chestnuts outside their native habitat. G. H. Corson, of Toronto, expects to be present and if so will certainly have some originally expressed ideas to enliven us with. U. P. Hedrick, of the Geneva Experiment Station, cannot be present, but writes that he is growing almonds on the Station grounds and trying to cross them with peaches. He thinks that he has such a cross. T. C. Tucker, manager of the California Almond Growers' Exchange is trying to get Prof. Ralph H. Taylor, formerly of the University of California, to send, or present, a paper, probably on the possibilities of getting an almond for Eastern culture. W. O. Potter, of Marion, Ill., hopes to send some exhibits of filberts.

I wish to ask all members, whether they can be present or not, to try to present to the convention, for the benefit of the cause of nut culture, some communication, demon-

stration or idea. Dr. Morris thinks that the idea suggestion is little risky, or even dangerous; but I think that the rest of us are quite able to defend ourselves.

In my notes in the June Journal, I am made to say, apparently, that the great pecan tree at Hartford has increased to nine and a half inches in circumferences. It should be to nine feet, nine and a half inches.

On one of my recent walks in the parks of this city I saw a thicket crowned with the unmistakable bloom of the chestnut. It was a clump of chinkapin bushes at least ten feet high, covered with bloom and already setting burrs. One blighted bush stood covered with last year's burrs, but the rest appeared healthy. My own chin-kapins, about three feet high, dug in the woods about Washington and carried home in my trunk, last year in their second summer bore several handfuls of beautiful sweet nuts, not so very small either. This year they are again in full bloom. I can very gladly support Dr. Morris's effort to popularize these attractive and useful nuts. Dr. Morris tells all about the chin-pakins and how to grow them in the seventh annual report of the association, and his hybrid chinkapins, very blight resistant, are referred to in the appendix of the twelfth report. In the seventh report is also Dr. Van Fleet's valuable paper on his blight resistant hybrid chestnuts and chinkapins.

Today I went to Glastonbury to the house where J. H. Hale the peach king used to live, now the home of his son. In front of the farm office is a beautiful specimen of Japanese chestnut loaded with bloom, conspicuous against the glossy dark green foliage. Mr. Hale says that a few years ago the tree appeared to be dying. It was cut back severely and threw out new growth vigorously. Now its low head, thick trunk and compact growth make it handsome and distinctive. Close observation shows many healing blight cankers on the larger limbs which do not become girdled and die as do some of the smaller limbs.

At a neighbor of Mr. Hale's I found two handsome young Japanese walnut trees, one bearing its second crop in clusters of very fair sized heart nuts. The Japanese walnuts have been widely distributed and are not an uncommon sight to the watchful eye. Today I found a very handsome one on a street corner. The owners call it a Japanese butternut. In a backyard on the same street is the parent tree which I was told bears the same kind of nut. This is the first instance that has come to my notice of the fruiting of a tree grown from a "Japanese butternut."

For Memorial Trees

Referring to the Road of Remembrance from Buffalo to New York city, which it is proposed to line on both sides with elm trees in memory of the dead of the World war, certainly such a road lined with large elm trees would present an imposing appearance. But would not this memorial road be just as imposing with the added

advantage of future usefulness if the trees planted were such as the stately walnut, the hickory and the white oak? asks a correspondent of the New York Sun.

Fighting Walnut Pests

W. T. Webber, sales manager of the California Walnut Growers' Association, says: "If walnut aphids can be kept from sapping the vitality of the trees and walnut worms can be prevented from boring into the young walnuts, it is reported that California this year can produce a world-beating crop. "There is a heavy setting of walnuts this year, and the crop should be easy to sell at good prices if we are able to offer size and quality. It is a certainty that sales will be slow and prices low if the crop runs to small nuts of indifferent quality."

"The American public demands walnuts of good size and quality from California. We get better prices than foreign producers receive, because the consumer has discovered that he gets better walnuts from California. If we grow a poor crop we must go back on a price competing basis with French and Manchurian walnuts."

Speaking of the effect of aphids and worms in walnut groves, Mr. Webber asserts that he knows of one large walnut ranch, the owner of which was unwilling to dust his trees because of the slight expense. "This grove," he declares, "produced last year a crop that ran 60 per cent culls, and this year the trees are carrying not more than one-third of a normal setting, while trees in neighboring groves show better than a normal setting."

The cost of dusting, in the opinion of association officials, is frequently less than the additional cost of packing house labor required to handle a crop of small and wormy walnuts from a poorly-tended grove.

"Of all the forest trees found in the original forests of America," says American Forestry, "the black walnut probably suffered most at the hands of the early settlers. This is due to the well known fact that it stood upon the best land in the fertile valleys and bordering foothills. These areas were selected by the pioneer farmers for their clearings and farms. A large number of the choicest black walnut trees were felled and burned simply to get rid of them. Many more were split into fence rails or put to other similar ordinary uses before the real merits of the wood became known."

Rumania Sends Many Nuts to United States

Rumania exported 3,806,600 pounds of unshelled nuts and 49,500 pounds of shelled walnuts to the United States in 1921, according to a report to the Department of Commerce from Vice Consul Bigelow, Bucharest. The declared exports of walnuts at the American consulate for the first two months of 1922 were 1,811,600 pounds, or nearly half as much as for the entire year 1921.

If it relates to nut culture it should be in the AMERICAN NUT JOURNAL. Please send it in.

Nut Growing in Nebraska

Editor American Nut Journal:

My unfortunate letter that I wrote when I renewed my subscription to the Journal and Association got caught in the wheels of the press and appeared in the January issue, was mentioned with comments in the May number by Henninger of Indiana and Sharpe of Kansas.

It appears that some of us must run our own experiment station in growing nut trees.

Last spring I planted six varieties of nut trees: Japan walnut and butternut seedlings secured from a local Nursery; Persian walnut, hickory, filbert and four varieties of pecans from J. F. Jones, Lancaster, Pa., and J. F. Wilkinson, Rockport, Ind. Previously to this spring have planted only black walnuts. All trees planted this spring are now alive so you see I am now anticipating. The pecans are all growing more or less slowly. The Beaver hickory and Mayette have surprised me, both making making a good growth. I feel that if the Persian walnut succeeds in Lancaster, Pa., it should here. There is a very interesting thing about the Mayette trees; they have such a nice branch of fibrous roots and no tap roots, so it would be of interest to know what is the graft stock. It appears to me that the tap root should be amputated after the first year's growth, so as to produce the branch fibrous roots; this would be done in transplanting.

We had a dry and hot spell in June which was severe on all my nut trees, but Mayette appearing to be affected least of all. Fine rains have revived them.

After reading the very positive statement by Percy Bros of Oregon, in May number, I do not think Mr. Sharpe of Kansas or I would have purchased filbert trees if we had received the information first. However, my Noce Lunghe apparently on account of its very heavy leaves was not affected, while the leaves of Barcelona and Daviana were blighted or scorched.

Yes, Mr. Sharpe, you are correct, the hickory near here is the bitternut (*Hicoria minima*). When I was a boy in Connecticut we called them pig nut or bitternut. Yesterday, the 5th of July, I visited the fine young forest eight miles south of the city where there were quite a good many of these hickory trees. Some had grown over 70 feet high, now dead and fallen. I think the grubs will get all of them.

Now Mr. Henninger of Indianapolis drops a fork in the cylinder stating that he is "not at all interested in the kind of nuts which are native here." This is a surprise, for we have been made to believe that the Indiana pecan trees are magnificent and should be planted here in the north; so what is wrong with them for Indianapolis?

I have delayed planting Indiana pecan because I was skeptical that they would succeed 200 miles further North in a semi-arid climate where the winters must be much more severe than in their native state. Then C. A. Reed has plainly stated repeatedly that the black walnut is about the only one to be depended upon in this parallel.

Last winter I tried to purchase the Thomas and heart nut but could not get them.

Last spring I planted about 400 pecan nuts beside a Scotch pine hedge I set out about five years ago where ever since the pesky moles have had a rendezvous, so I have learned that the pecan is an article of diet not mentioned in the U. S. bulletin on the subject of moles. My ground is so mellow

that the mole does a lot of work unobserved. I am getting them with the scissor trap.

Last year, May and June, my wife and I visited in Connecticut, our native state. On returning home we stopped in Lancaster, Pa., one of the most delightful spots on the earth. There the first of July we saw the great wheat fields ready for the harvest. We were entertained by Mr. Jones and his family in their ideal home. He showed us his Nursery and the beautiful English walnut trees grown by his neighbor, Mr. Rush. Then three months later the Northern Nut Growers Association convened in Lancaster. I was there in spirit only. Ever since I have looked in vain for a write-up in the Journal of Mr. Jones and his work. What better could be done to tell us what trees he is growing and with what success. Does not Mr. Jones merit it? He had to do a lot of extra work to entertain the Association.

When a boy of 13 my father with his family moved from Connecticut to Iowa. I have seen the beginnings of work in agriculture in Iowa and Nebraska. If any one in New England thinks he can give us front page advice as to what nut trees to plant in the semi-arid Middle West perhaps it would be well for him to come out here for a time and get acquainted with conditions. However, I wish to request that he does not misquote my statements. In the January issue I did not say we are not progressing. I did say if we "plant the species that belong to that locality . . . we would not progress."

It is plain that if in a locality we have no trees or none of value, we must seek those of another locality. I would like to ask if any one in Connecticut is planting pecans, filberts and almonds, and with what success. The black walnut does not amount to anything there. The chestnuts are all dead. The only native nut trees of value are the shagbark hickory, still monarchs of the forest.

We have a large number of nut trees that are making inroads into Nebraska. This is the western border of nut trees. In this vicinity the black walnut is the only one indigenous that is growing with success. Of course, I am not considering the fine oaks, for we are not interested in them for food. The chestnut does not grow well here in this vicinity; 60 miles southeast near the river there are some very fine trees.

I have been trying for two years to get some Japan walnuts. Last winter Bro. Bixby took pity on me and sent me one pound. I wish to say that I want this fall at least one half bushel of Japan walnuts. I would not object to have them off of J. J. Kelsey's big tree, the one that has made the growth of 100 feet in 14 years and produced nuts for ten years.

W. A. THOMAS.

Lincoln, Neb.

Pecan Tree Borers

Two kinds of borers attack the pecan trees, according to J. R. Watson, entomologist of the Florida Experiment Station. One girdles the trunk and the other bores directly to the heart.

The girdler is more destructive to young trees. It feeds just beneath the bark and can be detected by blackened areas which run spirally around the young trunk. The best remedy in this case is to dig the grub out. It is also well to paint the tree trunks with whitewash containing some salt as a precautionary measure.

The other borer is not so easy to reach. If the tunnel where the grub works is not too crooked, the grub may be killed by

For Northern Nut Orchards

Editor American Nut Journal:

I have read Dr. W. C. Deming's reply to my article in the May Nut Journal. This is just what I wanted to accomplish, and I want the members of the Northern Nut Growers Association to join in and make this a lively campaign for the general discussion of the practicability—also the impracticability of northern nut culture.

Yes, why does not the Northern Nut Growers Association advocate the planting commercial chestnut orchards? No doubt they do in a very meager way. But I do not see any results of their work. Where are the orchards of commercial chestnuts here in the Central or Middle West States? I do not know of any that are either growing here or are in the making,—with the possible exception of Riehl's orchard, which has been under discussion. The world and the public in general ought to know about it if you have a good thing. Use the radio and broadcast it.

Dr. Deming takes exceptions to my statement that I am not interested in our native nuts, and do not see any money in their culture. I suppose it is generally understood that I mean black walnuts, butternuts and hickories when I mention native nuts; and the mere matter of fact that none of these nuts are grown here commercially in a cultivated form—only wild ones being obtained is evidence enough of their being unprofitable.

Dr. Deming has surely misunderstood me when he says that I have given up the idea of English walnut culture here in Indiana. I still think that the English walnut will fruit here. I know that they will grow here, for I have some very fine young trees. Although I have no grafted trees, I think I have just as good chances to produce English walnuts as any Nurseryman with his grafted trees. Dame nature surely was never partial to either grafted or seedling trees, and I understand that grafted trees have fruited here.

The point I tried to make in advocating the planting of chestnut orchards here in this locality was this: If you want to interest a man in anything you must be able to show him that you have a good, safe and reliable money-making proposition, and it looks like the chestnut is it. From this source we can expand into other lines of northern nut culture. Also, why is it not to one's advantage to plant chestnuts here since the Eastern states have practically lost out in this business?

In conclusion, I repeat my former statement that the Northern Nut Growers Association has progressed very little, if any, in the task it has undertaken. If the Association has progressed, I do not see any outward evidence of their success. Where are the orchards of English walnuts, pecans, filberts, chestnuts, etc., that ought to be planted here?

Let all of us Northern nut growers keep at this thing and straighten it out for them. I believe a success can still be made out of the business. The business seems to be all right—there must be something wrong with us.

CHAS. O. HENNINGER.

707 Terrace Ave., Indianapolis.

gouging with a wire. Another method is to put in the hole a drop of carbon disulphide with a medicine dropper or pipette. The mouth of the hole must be sealed immediately with paraffin, or wax of some kind to prevent the gas from escaping.

American Nut Journal

COVERING NUT CULTURE

NORTH—SOUTH—EAST—WEST

AMERICAN FRUITS PUBLISHING CO., INC.
50 State Street - - Rochester, N. Y.

RALPH T. OLCOTT, Editor and Manager

Official Journal Northern Nut Growers' Assn
Official Journal National Nut Growers' Assn

SUBSCRIPTION RATES

One Year, in advance.....\$2.00
Canada and Abroad..... 2.50
Single Copy20

ADVERTISING RATE

Per column inch.....\$2.80
Forms Close 10th of each month

ROCHESTER, N. Y. JULY 1922

NUT ASSOCIATIONS

California Almond Growers' Exchange—President, G. W. Pierce; manager, T. C. Tucker, 311 California St., San Francisco.

California Walnut Growers' Association—President, C. C. Teague; secretary, W. T. Webber; manager, C. Thorpe, 1326 East Seventh St., Los Angeles, Cal.

Georgia-Florida Pecan Growers Association—President, J. M. Patterson, Putney, Ga.; vice-pres., A. C. Snedeker, Blackshear, Ga.; sec'y-treas., J. S. Wight, Cairo, Ga.

National Nut Growers Association—Prest., Charles A. Simpson, Monticello, Fla.; vice-prest., J. M. Patterson, Putney, Ga. and E. C. Butterfield, Winona, Tex.; secy., J. Lloyd Abbot, Spring Hill, Ala.; treas., J. Slater Wight, Cairo, Ga. 1922 meeting, Thomasville, Ga., Oct. 4-6, 1922.

National Pecan Growers' Exchange—President and manager, William P. Bullard, Albany, Ga.; vice-pres., J. B. Wight; secy-treas., A. D. Galt.

Northern Nut Growers' Association—President, James S. McGlennon, Rochester, N. Y.; vice-prest., J. F. Jones, Lancaster, Pa.; treas., Willard G. Bixby, 32 Grand Ave., Baldwin, N. Y.; secy., Dr. W. C. Deming, Georgetown, Conn. 1922 meeting, Rochester, N. Y., Sept. 7-8.

Texas Pecan Growers' Association—President, H. G. Lucas, Brownwood; vice-prest., John P. Lee, San Angelo; Secretary, Oscar Gray, Waxahachie.

Western Nut Growers' Association—President, Ferd Groner, Hillsboro, Ore.; secy-treas., C. E. Schuster, Corvallis, Ore.

STUDYING NORTHERN NUT PESTS

Another valuable bulletin by Fred E. Brooks, entomologist making special study of insects attacking nut trees and nuts in the northern states, has just been issued by the U. S. Dept. Agr., Bureau of Entomology. The subject is "Curculios that Attack the Young Fruits and Shoots of Walnut and Hickory." The life history and depredations of the butternut curculio, black walnut curculio, hickory nut curculio and hickory shoot curculio are described in detail and clearly illustrated, and methods of control are indicated.

Nut growers of the Northern States are fortunate in having the results of these investigations thus early in the movement to foster the preservation and improvement of the native nut trees of the North. Where man plants trees of one kind in considerable number, there congregate the insects which find that kind of tree a most congenial host plant, and in numbers proportionate to the number of host plants. It is of special advantage, therefore, to have Mr. Brooks' study and deduction in advance of the accumulation of host plants in orchards and to be forewarned and prepared. Bulletin 1066, U. S. Dept. Agr. will be of special interest to northern nut growers generally.

Just mention AMERICAN NUT JOURNAL.

THE STATE OF THE ART

The comment by Charles Henninger, an active member of the Northern Nut Growers' Association, on the progress of nut culture in the northern states and the part taken therein by the Association constitutes profitable discussion, in that it brings out definitely just what has been done and the difficulties encountered. It is largely a matter of time. Compare the time elapsed before horticultural results generally with the time elapsed since nut culture in the North was proposed!

Willard G. Bixby, of Baldwin, N. Y., says: "I can quite understand Mr. Henninger's position. I would certainly be most pleased to be able to prepare a map of the United States, dividing it into zones, and tell prospective nut planters just what would be a success in each zone, and also a financial success. But I really do not believe there is any man alive today who could do this at the present time. I read a paper at Lancaster which seems to me has outlined the method for doing this more definitely in the case of the pecan than was ever done before, but to work out the calculations needed for presenting this method in map form covering the northern and eastern United States is something that I have not had time to do and those assisting me have not had time to do. In one way I doubt how useful this would be until we had had opportunity to check up a little better, how results predicted by this method compare with the results actually obtained. Where I have been able to do this, however, they have generally checked up well. I believe that a similar method can be worked out with the English walnut, but it is evident that it will not be the same method. As mentioned above, I can quite understand Mr. Henninger's position and had I chosen to put my feeling of the lack of definiteness of information received from Dr. Deming and others, when I first became a member of the Association, I would have issued a complaint very much like Mr. Henninger's. "What Mr. Henninger and all new members of the Association would like to do is to eliminate the time needed to test out the various varieties in various locations. Modern methods and free expenditure of energy and money can do this to quite an extent, but they can not do it fully, and the Association is very far from being in a position to devote to the project all the expense and service that it would be possible to put on the project."

NATIONAL ASSOCIATION'S PRESIDENT

President C. A. Simpson of the National Nut Growers Association, is at the head of the Simpson Nursery Co., Monticello, Fla., one of the oldest and best known Nut Nurseries of the South, wholesale growers of grafted and budded pecan trees. Mr. Simpson is of a family long and favorably known both in nut and general Nursery circles. The Knox Nurseries, H. M. Simpson & Sons, Vincennes, Ind., has ranked for many years as one of the most prominent in the country. It was in Vincennes that President Simpson was born in 1876. He was graduated in 1895 from Vincennes University and in 1898 from the School of Engineering. During the Spanish-American war he was sergeant in the Second Volunteer Engineers, Co. D., and saw service in Cuba after the armistice with Spain.

In 1899 he took a position with the Kellogg Switchboard and Supply Co., Chicago, Ill., where he worked in the engineering department until 1911. During the last three years there he was first assistant to the chief en-

gineer. This company manufactured and installed telephone switchboards, telephones, and automobile supplies.

In fall of 1911 Mr. Simpson bought half interest in the Simpson Nursery Co., Monticello, Fla., and moved to Monticello. Since then they have shipped from 75,000 to 140,000 pecan trees each season. For the past six years they have grown and sold nothing but pecan trees.

Since living at Monticello, Mr. Simpson has served two terms as city councilman, was county chairman of all the Liberty Loans, and was elected captain of the Jefferson County Home Guards during the war. He is president of the Monticello Chamber of Commerce; elder in the Presbyterian Church, and director in the Bank of Monticello.

He has served two terms as president of the Georgia Florida Pecan Growers Association, and is now on his third term as president of the Southeastern Pecan Nurserymen's Association. He is president of the Southern Nurserymen's Association and of the National Nut Growers Association.

Mr. Simpson was married in 1903. He has three boys, ages 17, 13, and 4.

The Simpson Nursery Company has developed the Arthur Pecan Co., Albany, Ga., 700 acres of pecan trees; the Minninette Orchard Co., 200 acres of pecan and peach trees, and the Georgia-Florida Pecan Co., 2,000 acres of pecan trees.

TO FIGHT INSECT PESTS

The United States Department of Agriculture is planning an aggressive fight against insect pests in this country, the first step in which is its endorsement of the bill introduced recently by Representative Allen F. Moore, of Illinois, authorizing the acquisition for \$300,000 by the Smithsonian Institution of the Dr. William Barnes collection of lepidoptera.

The Barnes collection, consisting of several thousand types and co-types and hundreds of thousands of specimens, is to be disposed of by the collector. At least one state, several universities and a number of foreign collectors have sought it, but officials of the Department of Agriculture agree that it belongs in the Smithsonian Institution where it will become available to the entomologists of the department, as well as state entomologists, universities, scientists and students all over the United States. Dr. Barnes has spent forty years of his life and over half a million dollars in building up the collection. It is rated as the largest and finest of its kind in the world. Duplication of it, if such were possible, would require years of work and the expenditure of hundreds of thousands of dollars.

Scores of endorsements of the bill have been received by Representative Moore from state entomologists, state universities, scientists, farmers and organizations representing groups of individuals who bear a portion of the billion and a half dollar loss suffered in this country every year from this source.

Mildew and scab are summer diseases of the pecan which can be controlled by spraying with standard bordeaux mixture at frequent intervals during June, July, and August.

Mildew is recognized by a flour-like, whitish coating which covers whole leaves and nuts. Its greatest damage is to the young nuts, causing an excessive dropping of nuts under moist, humid conditions.

Will Pecans Come True to Variety When Nuts Are Planted?

By H. A. HALBERT, Coleman, Texas

In all my study of natural laws I have never found a single instance of an exception to the universal law that "like begets like," hence he who affirms the above proposition needs no argument to sustain his side of the question. But he who denies the proposition has the burden of proof to show that the pecan is an exception to this universal law.

I am aware that I am considered an Ishmaelite on this question among pecan men, and in the language of the poet.

"I feel like one who treads alone
Some banquet hall deserted;
Its lights have fled, its garlands dead,
And all but he departed."

Yet being conscious that I stand on the side of nature and her laws, I shall proceed to hew along the lines of facts and fairness and let the chips of consequence fall upon whom and where they may.

Before I enter upon my regular line of argument, I wish to mention some extravagant expressions in public print, some unfair tricks resorted to, and some suppression of facts by the advocates of the negative side of the question to sustain their contention.

I will mention two instances of extravagant expression as a fair sample of others. Both of these appeared in the March issue of the Pioneer Pecan Press. In the same editorial one referred to a seedling of the Hollis pecan, regarding which the owner, it is stated, will make affidavit that it was a true type of the parent nut, yet the editor says that the parent nut and the seedling did not any more resemble than a goat does a sheep, two very distinct species of animals, not different varieties of the same species. Thus leaving the inference that should any one plant a pecan he is just as liable to get a different nut,—like the walnut or chestnut.

The other expression is quoted from Dr. A. C. Ellis as saying there should be a law to send a person to the "pen" if he ate a pecan that would come true. Such a law would be inclined to prevent people from eating pecans for fear of being sent to the "pen," for no one can look at a pecan and tell whether or not it will come true if planted.

But of all the tricks to mislead and create a wrong impression, the one perpetuated on the Swinden (now the Capps) orchard, beats them all. This happened in the fall of 1906, when the National Nut Growers' Association met at Dallas, Texas. Two hundred and fifty samples were gathered from that many trees, out of several thousand trees in this orchard, of the most inferior nuts. In fact, these inferior nuts were considered worthless for the market by the foreman, and were left on the trees to fall off for the hogs to eat. Yet they were gathered and placed on exhibit at the meeting of said association by some advocates of the negative, with a sign in large letters over the jars containing these worthless nuts, reading as follows: "This is The Result of Planting a Seedling Pecan Orchard." When, as a matter of fact, this orchard located within two miles of this meeting here at Brownwood, grows some of the largest and finest nuts found in Texas, and some are true to the variety planted by Mr. Swinden.

I will now relate some suppression of facts: When I discovered this trick in the spring of 1907, I tried to expose it for the

sake of truth and justice, in an article prepared and sent to the editor of the "Nut Grower" of Poulon, Ga., then the organ of this association. But the editor turned it down and made me a promise that if I would have gathered the samples of the fine nuts I claimed this orchard bore and put them on exhibit at a meeting of the National Nut Growers' Association, he would publish the facts to counteract the wrong impression created by these inferior samples. So I had gathered five hundred samples from that many trees the next crop, and had them placed on exhibit; and they were as fine a lot of pecans as it was possible to gather anywhere. But no notice whatever was given of the exhibit by the editor of the "Nut Grower," so I lost the labor as well as these fine nuts. The facts and the nuts were both suppressed. This happened at a meeting at Norfolk, Va., and I could not attend. I will mention another suppression of more recent date. I contributed one-half column to the April issue of the Pioneer Pecan Press on the above subject, and challenged anyone to a friendly discussion. The editor of the Press accepted my challenge, and devoted three and a quarter columns of his paper in answering my one-half column. I then prepared a rejoinder to his reply and mailed it to him for publication. He promptly returned my rejoinder, which I thought was logical and to the point, and called it, in his letter, "nothing but cantankerous rot." Now, I wish to read this suppressed rejoinder, for two reasons: First, because I believe it contains some good points sustaining my position. Second, I wish to leave it to my audience whether the editor was justified in rejecting my rejoinder and branding it with such a rough slang phrase. The article is as follows:

Editor Pioneer Pecan Press:

In discussing the above question, I know that you, being the editor of the medium of discussion, have all the advantage of the contributors, in quitting when you get ready—when you have had your last say. I experienced this in our discussion of the tap root system. Nevertheless, I will take what privileges you will allow me, and discuss this question in a fair, logical and scientific manner.

Nature makes no distinction in the laws of breeding between animals and plants. They are the same in both. Then, in your reply to my first article under the above heading, you surrender your side of this question and confirm my contention, when you say, "We can easily select both male and female in the breeding of live stock, but in the case of the pecan the female bloom is fertilized from every passing breeze with male pollen from a thousand hybrid trees." Exactly! Then it is because we have not tried or cannot control the male in the pecan that they do not come true, and not because the pecan is an exception to the universal law. Would not animals be as numerous in type as pecans, if their breeding were not controlled any better than that of the pecan? Let us illustrate this point in the case of poultry. Suppose a farmer has a male and female of some pure breed running in a flock of some fifty scrubs, among which are many mongrel types of males. Could this farmer guarantee this pure-bred hen's eggs to all hatch true. The eggs all look alike, and no doubt some of them would come true. But suppose he puts this pair of true types in a pen to themselves. Why cannot he guarantee them all to come true? If this is the case with the hen, why not with the pecan?

You quote from Mr. Risien, whom I honor very highly for the work he has done for the pecan industry in Texas. But the language you quote sustains my position, to-wit:

"In my seedling orchard of one thousand trees, and all from one mother tree, San Saba, no two of her children are alike" Now, this San Saba tree stands, or did stand, at the time he planted these nuts, in a wild forest of pecan trees, with "the thousand hybrid trees" to furnish pollen for the female blooms, and what else could be expected when the chances were good to have one thousand different fathers. Besides, Mr. Risien's work has not been to breed a pure type of the same pecan, but more the very opposite, to cross different types, endeavoring to secure a superior type from the cross pollination. No grower that I know of has made the least attempt to breed a pure variety of pecans. They all do the very opposite by planting many different varieties in the same orchard. Would not animal breeders have things as badly mixed as the pecan men, if they turned all kinds of fowls, hogs, sheep and cattle in the same pasture, to breed promiscuously?

You quote a long paragraph from Mr. Munson which does not touch on the point under discussion, but refers to breeding a prolific variety.

I have no seedlings to enter for Mr. Burkett's reward of \$10 for a true type, though I consider his requirements very exacting. I plant the nuts, of course, and the very best that it is possible to obtain, in preference to transplanting the budded trees, even if given to me. I get a better root system, and it is twenty to one times cheaper than to buy the trees to transplant. Yet I am too expert to wait seven to ten years for results, when I can get it in half the time by budding, even if I knew that every seedling would come true. But the people are waiting and will continue to wait, before they will buy the high-priced budded trees and risk their dying. Then why not encourage them to buy fine nuts to plant and take chances of them all coming true. We know that a portion of them will come true under adverse circumstances. The people will have something valuable in a few years to show for their waiting if they plant nothing but the common nuts. Otherwise they will have nothing.

You advocates of the negative, while you make no efforts to breed true types, but leave it all to chance mating, are more exacting in your requirements than breeders of fine stock. The nuts must be of the same size, yield the same per cent of kernel, be of the same shade of color and have the same identical stripes and dots. In other words be as exactly alike as the proverbial black-eyed peas, before you pronounce them true to type or pay the \$10 reward. Let us examine a herd of purebred Hereford beeves. Are they all the same size? Will each carcass cut the same amount of meat? Are they the same shade of red color? Have they all the same amount of white on the neck and flank, running down the spine? Have they all the same erect or droop of horns, or the same flop of the ears? Why not allow some individuality in the pecan as in all well bred cattle and poultry? You cannot find every nut coming up to your requirement, even when grown the same year on the same mother tree.

I am the only pecan grower who is struggling out one variety and growing it exclusively, with no wild varieties on either side of my orchard from which the prevailing wind blows. Hence, I have the right to claim, and nature's law backs my claim—that the Halbert pecan or any other variety will come true under similar circumstances, barring the law of atavism. The law of atavism is simply a running back to past ancestors to a small per cent. It is seen to crop out more or less in the human race and all varieties of animal and plant breeding.

(Signed) H. A. HALBERT,
Coleman, Texas.

I do not care to add much more argument to sustain my position than what I have read in the above suppressed article, but wish to use more extensively the comparison referred to above, as to poultry breeding, to make some of my points clearer as to pecan breeding.

Now, an egg and a pecan are alike in several particulars. The embryo of each is encased in a shell. It takes warmth and moisture to develop the embryo into an active

(Continued on Page 11)

The American Nut Trade: Market and Crop Reports

THE PECAN

National Pecan Exchange

In his report June 15th on the 1921 crop President William P. Bullard said:

"The Exchange handled this year five hundred forty-eight thousand one hundred and six (548,106) pounds, green weight. Of course there is always shrinkage from the green weights. We are carrying a trifle over a hundred thousand (100,000) pounds in cold storage, most of it of medium grades; we are selling and shipping daily and expect to be sold out before the next crop comes on. We could have sold out ere this had we been willing to slaughter like others have done. Good orchard run Frotscher sold at 12c; Moneymaker at 11c and Stuart and others at 15c, some fairly good at 9c. No marketing association yet devised can stem a tide like that and sell a large volume at normal prices and do it in a hurry. One of the tenets of a co-operative association is to stabilize prices; it must not participate in price demoralization or it will lose the confidence of both grower and buyer. While it will take a little longer to clean up, yet we are satisfied we will be able to return much more money by not sacrificing. The present outlook is for a much smaller crop than in 1921, and prices are already stiffening. The first outcome will be good and you will be well satisfied that we did not sacrifice dreadfully in order to clean out.

"We cracked thirty-six thousand five hundred seventy-five (36,575) pounds of the worst nuts. Market for nut meats is slow and low. The financial failure of one of the biggest nut handling and shelling concerns depressed prices of meats. We did not have facilities in our present quarters to do much cracking to advantage but in our new home we will have ample facilities for everything in the nut line. We have about five thousand (5000) pounds of nut meats on hand but are gradually selling out. We sold completely out of Apex, Schley, seedlings and some other single varieties, and have only a small quantity, seven thousand three hundred twenty-three (7323) pounds of Junior on hand. We have sold about 68% of Overgrade; about 13% of Near-grade, and about 49% of Frotscher. We received over 80,000 pounds of Mobiles and sold 75%. They will soon all be sold. We sold all our seedlings at from fifteen to twenty cents, depending upon grade, while buyers in Albany were getting large stocks of seedlings freely at from eight to twelve cents.

"We made efforts last fall to secure an estimate from the growers of what nuts they would have but got little information. The result was that in November after big buyers had placed their orders we suddenly received double the amount of nuts we expected to get and more than we had prepared for in either plant or clerical force. Some days we received as many as twenty-five thousand (25,000) pounds per day. We found it impossible to pick up highly competent help on the spur of the moment such as our work requires.

"In our new building we will have facilities to turn out a car load a day at the peak of the harvest; and will have plenty of experienced plant and clerical help and will

keep the best ones the year around. We consequently will agree in our crop contracts this year to give not later than March 31st a statement of grading data with sales and carry over records if any, with approximate estimated value of carry over."

At Citronelle, Ala.

Citronelle, Ala., June 10—My crop and in and around Citronelle is above normal, I think. Some varieties are dropping more or less, Schleys and Frotschers.

T. W. SAWYER.

33 Per Cent at Putney, Ga.

Putney, Ga., June 29—So far as our groves are concerned, I do not believe the crop will be over 33 per cent of last year's crop.

J. M. PATTERSON,

President Paper Shell Pecan Growers Assn.

At Columbus, Ga.

Columbus, Ga., June 22—As to the prospects for a pecan crop in this section, six weeks ago we thought that we would have another bumper year. But on recent investigation, we find that the crop will be somewhat shorter, to what extent we cannot ascertain at this time.

SOUTHLAND PECAN CO
S. G. Simons.

Light Crop In Louisiana

St Martinville, La., June 27—The pecan crop in this section will be about 15 to 20% of a normal crop. It seems to be very poor and I am at a loss to explain this shortage.

J. R. OLIVIER.

50 Per Cent at Oaklawn, La.

New Orleans, La., July 7—We expect a 50% pecan crop in the neighborhood of Oaklawn, La., this year. While the old trees are not doing so well, the young trees are doing very nicely and will help things out considerably.

EDWIN BECK.

At Luling, Texas

Luling, Texas, July 5—Reports from farmers in this section show that the pecan crop is going to be almost a complete failure this year on account of the continued rainy weather.

Case-Bearer at San Saba

San Saba, Tex., June 24—Since I reported to you early in the month on the pecan crop in this section, the case-bearer has nearly made a clean-up, so the crop will be a very light one.

E. H. NORRIS.

Lufkin, Texas, July 5—The pecan crop in this section, which last year amounted in dollars and cents to more than a cotton crop, is going to be almost a total failure this year, according to reports from farmers. The blooms are being destroyed by a small insect somewhat resembling a gnat.

Smithville, Tex., July 3—From information received through the people from the country around here the pecan crop will be a failure. This was caused by a late frost as well as a worm that ruined what few the frost left.

Weatherford, Tex., July 1—The case-bearer is doing considerable damage in pecan trees throughout Parker county.

If it relates to nut culture it should be in the AMERICAN NUT JOURNAL. Please send it in.

PERSIAN WALNUT

San Francisco, July 1—Walnuts this year are 83 per cent of a normal. Last year the condition on June 1 was 77 and the 10-year average is about 87. Owing to new-bearing acreage and older trees, a better crop than either 1920 or 1921 is indicated, but the production will be somewhat less than in the record year of 1919.

Chinese Walnuts

In view of the fact that C. A. Reed, U. S. nut culturist, and Carlisle Thorpe, manager of the California Walnut Growers' Exchange, are in China studying the walnut situation, it is of interest to note that the species best known in China is the *Juglans regia*, which has a wide growing area extending from Greece to the Himalayas and on through Asia into extreme Northern China. These trees, growing in many parts of China, bid fair to become of increasing commercial importance, except where transportation is still primitive and the natives have not yet realized the value of the nuts, thus preventing them from entering into the commerce of the country.

An American firm exporting walnuts from the ports of Tientsin has estimated the production of four Provinces of North China as follows: Chihli, 2000 tons; Shansi, 3000 tons; Honan, 3200 tons; and Shantung, 500 tons. These figures, however, are in some cases merely guesses based on information received from dealers. No estimates have been found for the other walnut-growing sections of China. The same authority states that he is not aware of any walnuts being grown in Manchuria. It seems that the term "Manchurian walnuts" is a misnomer used largely in connection with those shipped into the United States from Tientsin.

In the China trade there are three well-known varieties, the double-shelled, medium hard-shelled, and paper-shelled. The medium hard-shelled is produced in largest quantities, while the paper-shelled is not extensively cultivated.

As with most of the commodities exported from China, the producers of walnuts receive but little of the profits. At the beginning of the harvest season, the local dealer contracts with the farmers for the crop, and later sends it to Tientsin, Hankow and other ports, where wholesale dealers take it over.

A NEW BOOK! NUT GROWING By Robert T. Morris

The latest and only up to date book on the newest and one of the most important branches of Horticulture, giving a broad survey of a rapidly growing industry. Detailed explanation of successful methods of propagation and the new process of grafting with the use of paraffin; illustrated.

An invaluable work for all nut growers.

Price, \$2.65, Postpaid

AMERICAN FRUITS PUB'G. COMPANY
39 State Street, Rochester, N. Y.

BACONTON, GA., A PECAN CENTER

Camilla Correspondence of the Albany, Ga., Herald

At Baconton, on the Bacon estate, is a large pecan tree, nobody knows how old, nor does anyone know how many thousand pecan trees have been given a name and a start from this old patriarch of the industry, for many, many years ago the large, well-developed nuts from this tree and the science of budding, coupled with the vision of one of South Georgia's noble citizens, gave birth to the enormous pecan industry as it is now known in the Albany district.

Age, however, does not make this great tree yield an inch to youth, for it is as vigorous and free from disease as the youngest and best kept of its neighbors and kind. Refusing to crumple up under the constant battle against time, it stands as an almost infallible proof of the permanence of the prosperity upon which the Baconton section has builded; for what else but a pecan tree grows better with age?

It is a strange rule that people do not generally take advantage of the great opportunities of wealth around them, but the enterprising people of Baconton have refused to be bound by this rule. In any direction that one might go out from this little city the whole landscape suggests a well-directed program of reforestation. It is estimated that the Baconton section holds within its environs a quarter of a million pecan trees, ranging all the way from one to thirty years old, not including the Nursery stock.

Perhaps the most striking example of a well-nigh perfect young grove is the one west of and immediately alongside of the Dixie Highway, two miles from Baconton. The trees have been planted but five years, but because of constant and expert attention, and being on strong, fresh soil well adapted to pecan culture, they appear much older, and one wonders how much uniformity of size can be attained in trees of different varieties over such a large acreage. This grove belongs to J. R. and J. B. Miller, two hustling young men whose father was a strong believer in the industry and seemed to recognize its limitless possibilities. These two young men have given up practically every other interest but the pecan, and of the ten thousand or more acres around Baconton they own two thousand. They follow the nut all the way to the immediate consumer. Beginning with a one-acre Nursery, they now have 75 acres in Nursery stock alone, and every year they add from 400 to 600 acres to their groves. They own a crackery, and during last season they cracked 150,000 pounds of paper-shell pecans, and have increased their plant's capacity to half a million pounds for next season. One of their associates, O. L. Williams, has patented a cracking machine that is a marvel and flattering offers of royalties have been received from

several well-known machine manufacturers. So, from the seed to the nut, transplanted, raised, cracked and ready to dip into the chocolate, the Miller boys are taking toll at every stage of the game.

The Jackson Supply Company, Harry U. Jackson, G. P. Jackson, Dr. R. P. Jackson, C. B. Brown, and in fact almost all Baconton citizens are transforming every nook and corner of their lands into beautiful pecan groves.

It is understood that a strong pull will be made to get the prospective pecan experiment station located at Baconton, and the citizens there stand ready to make some substantial concessions to Uncle Sam when he begin to look around for a place to alight, with his experiment forre. It is probable that officers will be offered and young and old groves will be turned over if required. The promoters of the experiment station for Baconton argue that they are located nearer the center of the pecan belt than any other place, and that they have a larger immediate acreage than any other place, and that they have larger facilities for housing and cracking than any other section. The claims of the Baconton section will no doubt come in for serious consideration before the experiment site is located.

The Pecan Plantations Company, Vidalia, Toombs Co., Ga., has been incorporated upon petition of J. B. Brewton, W. A. Jones and J. P. Rabun.

THE PINON NUT

The Albuquerque N. M., Journal says under recent date:

Mrs. Berthold Spitz returned yesterday from the east, after exhibiting and demonstrating her successful pinon nut-shelling machine at the candy show during the national confectioners' industries exposition, held at the Coliseum in Chicago during the week of May 22 to 27.

Mrs. Spitz has developed plans which have attracted the attention of some of the foremost representatives of finance and industry whose keen interest in her enterprise was a feature of the Chicago exposition, where crowds gathered daily about her booth, to witness the demonstrations of her model mechanism and enjoy the packages of shelled pinon-nuts which the F. S. S. Sunshine Nut-Shelling and Separating machine produced, much to the spectators' delight. "Nuts on a Christmas Tree!"—exclaimed the uninitiated visitors. Mrs. Spitz has returned to Albuquerque with a budget of requests for carloads of shelled pinon-nuts, and numerous inquiries for machines.

"It is opportune to remark," said Mrs. Spitz yesterday, "that in the early spring

when there was a forecast of the unprecedented crop of pinon-nuts to be expected from the 1921 yield, I endeavored to interest several of New Mexico's business men in the enterprise. Opportunity was knocking at the door of the state and every wide-awake dealer; carloads of nuts unshelled were persistently shipped out of the country. I am still receiving insistent demands for carloads of shelled pinon-nuts and for machines."

Mrs. Spitz is considering the leasing of her machines, her proposition covering the careful protection of the industry and her patents. She will retain the sole manufacture of the machines while she promotes this method of procedure in regard to her industry.

The recognition given her work by the leading confection manufacturers of the country, and the tremendous interest shown in her proposition throughout the trade which she visited during the past weeks, is considered the practical culmination of her work and the ultimate issue of the expansion of the shelled pinon-nut industry made possible by her inventions and promoted by her successful machinery. Mrs. Spitz has planned to make further demonstrations with her model unit used at the recent exposition in Chicago.

"The new models of my machines," says Mrs. Spitz, "will be white-enameled, glass and screen enclosed units, motor-driven, really the last word in nut-meat producing machinery, portable and occupying scarcely 3 x 3 foot floor space, which may include to order as required accessory labor-saving and cleaning devices usually acquired with a manufacturing outfit of the kind. The machine may be attached to an ordinary light socket A. C. or D. C. current-110-115 voltage. The operation of the machine is not more noisy than the ordinary sewing machine. At present I have the Exposition model standing as an 'ornament' in the dining room nook of my residence here, where I expect to operate it!

"There was such a persistent inference to my machine at the Exposition as a peanut 'blancher' induced by the rolling out of the white, blanched nut-meats of the pinons, that I found it worth while to try out the process on the 'persistent' peanut, and find that the machine does the work of blanching the peanuts with great success. It is rather interesting and unique to find the usefulness of the invention thus far-reaching, in view of my plans for the expansion of the industry."

Los Angeles, July 1—The condition of the almond crop is 78 per cent of a normal as compared with 77 last month, 60 last year and a 10-year average of 70. The crop is somewhat spotted, but a record production is indicated at the present time.

Alvation, Ky., July 4—The hickory and beechnut trees have a full crop this year.

If it relates to nut culture it should be in the AMERICAN NUT JOURNAL. Please send it in.

The Logical Market Place for Sale of Nuts The Advertising Columns of the *American Nut Journal* Chief Exponent of the Trade.

Hundreds of Readers of this Journal Ask for Pecan Nuts in Moderate Quantity at Prices Less Than the Retail Price per Pound in Northern Markets. They Would Be Eager Buyers if They Knew Where to Apply. If There is Any Surplus at Any Time, the Advertising Columns of this

AMERICAN NUT JOURNAL

Journal Will Dispose of It. Rate, \$2.80 per Inch. Announcement Should be Maintained the Year Around (Yearly Rate, less than 60 Cents per Inch a Week) to Secure Best Results. Make Your Name a Household Word Wherever Pecans Are Wanted. Make It Easy To Procure Them.

P. O. Box 124

ROCHESTER, N. Y.

THE PECAN

The pronounced success of the operations of the Paper Shell Pecan Growers' Association, under the personal direction of J. M. Patterson, Putney, Ga., has attracted the attention of a writer in American Fruit Grower, July issue, who in the course of his article presents some interesting facts regarding commercial pecan orcharding in Georgia. Land values have been increased in a comparatively few years from \$20 to \$300 an acre and in some cases to \$750 and \$1000 an acre under pecan culture. The pioneer in Southern Georgia was G. M. Bacon, who started commercial pecan culture twenty years ago. In what is known as the "Albany district" there are now approximately 70,000 acres of pecan trees, with an estimated value of \$15,000,000 to \$20,000,000. The crop is now about one million to a million and a half pounds, according to Secretary John H. Mock, of the Albany, Ga., Chamber of Commerce, and is increasing annually. It is bringing in from \$500,000 to \$950,000 annually to the district.

Replying to a query as to the cost of starting a pecan grove, Mr. Patterson said: "We have to pay \$5.00 an acre now to get good, raw land. We get the ground in shape. The trees and planting cost from \$35.00 to \$40.00 per acre, making the initial cost around \$100.00 per acre. We have paid from 80c to \$1.25 for good Nursery stock budded to the varieties desired. We are now charging each owner \$18.00 an acre a year for the care and cultivation which we give the groves. This does not include the cost of fertilizer, of gathering and marketing.

"The groves do not begin to pay real profits until the trees are about 12 years of age. Previous to this, they must be carefully cultivated and looked after. Not much pruning is required, but it is necessary to keep off the broken and damaged limbs, and to shape up certain trees during the course of a season. The better the condition of the soil, the better the profits when the

trees reach bearing age. For this reason, we have grown cowpeas and velvet beans for plowing under nearly every year in all the groves. We have used very little fertilizer until this year.

"Investigations made by Dr. J. J. Skinner of the United States Department of Agriculture, show that fertilizers play an important part in increasing the yield and quality of nuts. As a result we have secured an increase of from 4 to 10 pounds of

monia. Trees 8 to 9 years old should receive a minimum of 20 pounds of any of these mixtures per tree; trees 10 to 12 years old a minimum of 25 to 30 pounds, and trees above 15 years old, not less than 40 pounds. Apply the fertilizers in early spring before or about the time the trees bud out. Spread in a band around the trees, beginning 4 to 5 feet from the trunk and extending slightly beyond the spread of the branches and harrow or disk in after the ground is plowed."

"The age of the groves in the Paper Shell Pecan Growers' Association ranges from about 8 to 16 years, or averaging about 12 years. It gathered its first crop of nuts in 1913, with a yield of 6,000 pounds. In 1921, the crop was 600,000 pounds and the trees are just beginning their period of greatest usefulness. The nuts sold last season at a price ranging from 45 to 90 cents in the shell, depending on the variety and grade. The average price for one-quarter of a million pounds sold in the shell was 53½ cents per pound f. o. b. shipping point. The 13 and 14 year old trees yielded about 300 pounds of nuts to the tree last year. We make three grades of unshelled nuts—extra fancy, fancy and number three. All are sold in barrels containing from 170 to 200 pounds, and in boxes banded with iron and containing about 50 pounds. This past season we began the practice of vacuum packing pecan meats in glass and tin containers. This practice, we believe, will build up a trade in fancy meats kept fresh and sweet by the process of packing.

"The Schley is our preference, especially for fancy trade, but the Stuart is a hard variety to beat when considered in a commercial way. We find that the Stuart will bear from 25 to 50 per cent more than the Schley, which more than takes care of the difference in price received for the fancier nut. Last season we received about 75 cents per pound for Schleys and 50 cents for the Stuarts. The older trees, that is those about 15 years old, paid a net dividend of from \$75.00 to \$100.00 per acre. These

(Continued on page 11)

Budded and Grafted
HARDY NORTHERN NUT TREES
Best varieties, grown in natural nut soil. Send for catalog. Have your seedling nut trees topworked to these fine varieties.
Information and estimate on request.
INDIANA NUT NURSERY
Rockport. J. F. Wilkinson, Prop. Indiana

PECAN TREES

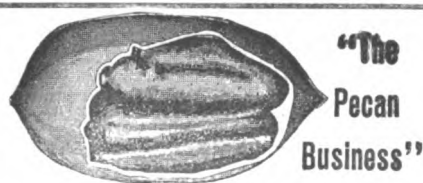
100,000 TREES—STANDARD VARIETIES
WE GROW NOTHING BUT PECAN TREES
HIGH QUALITY—SERVICE THE BEST

SIMPSON NURSERY CO., MONTICELLO, FLA

THIS SPACE
\$2.50 Per Month Under yearly Contract
Under less than yearly term:
\$2.80 Per Month

Texas Pecan Nursery Arp, Texas

THE PEOPLE THAT GROW
WELL-ROOTED PECAN TREES



NEW EDITION FREE

A practical guide showing how to bud pecans. Tells how to grow trees 12 inches in diameter by the end of the 8th year, which yielded 400 lbs. nuts per acre.

Trees, Nuts, Groves for sale direct without agent at attractive reduced prices
B. W. STONE, Thomasville, Ga.

THIS SPACE

\$2.50 Per Month Under Yearly Contract.
Including publication in both **AMERICAN NURSERYMAN** and **AMERICAN NURSERY TRADE BULLETIN**.
One Month: \$2.80 in both.

SUCCESS

and other leading varieties. Also citrus
BECHTEL PECAN NURSERIES
Ocean Springs, Miss.

PECAN TREES

Plant them this year! Buy direct from nursery and save agent's profit. All standard varieties; quality and service the best. Write us for prices.

FLORIDA NURSERIES

W. W. Bassett, Prop., Monticello Fla.

AMERICAN NUT JOURNAL

CHIEF EXPONENT OF
AMERICAN NUT INDUSTRY

Of National Circulation

Covering Every Phase of Nut Culture

Subscription: - - \$2.00 Per Year
Advertising: - - \$2.80 Per Inch

Official Journal { National Nut Growers Association
Northern Nut Growers Association

AMERICAN FRUITS PUBLISHING COMPANY

39 State Street, Rochester, N. Y.

were the groves originally sold by the company for \$200.00 and \$250.00 per acre.

"There is a marked difference in those groves where the soil was kept in a good state of fertility before the trees were planted over places where a rundown system of cotton farming had been practiced. The best trees in the association holdings are those in easy hauling distances of the old barn lots of cotton plantation days. Just below Dewitt, Ga., the association owns 900 acres of groves, 250 acres of which are on land given very little fertilization or any other care before the groves were planted. At present the trees on this 900 acre tract are eight years old, and the ones on the 250 acre tract are at least two years behind the others.

"We do not believe in intercropping. In the early days corn was grown for the work stock in the rows between the trees, but even this practice has now been abandoned, the only inter-cropping done is the planting of leguminous crops for plowing under. Mechanical power is used to a large extent in the orchard work. Eleven tractors are used for breaking and harrowing. A large number of mules are kept also for such work as the tractor can not do. Picking is done by hand, the matured nuts being threshed from the trees by long canes by 500 to 600 negro pickers. The nuts are then gathered and carried to the large warehouses. We go over the trees about five times, gathering the nuts as they ripen. They are then placed in wire bottom trays, through which a current of hot air is passed to dry them out in time for the early market."

Will Pecans Come True?

(Continued from page 7)

existence. Each, while in the shell, is a most concentrated and nutritious human food of the animal and the vegetable kingdom. Each egg of the same hen looks just like her other eggs, and so does the pecan of the same mother tree. Hence, you cannot look at an egg and tell in advance whether it will come true or not when the hen is running in a mixed flock. Neither can you look at a pecan and tell in advance whether it will breed true or not, where the mother tree is surrounded by other trees that bear all sizes, shapes and colors of nuts. But mate that hen exclusively with a male of her own variety and you can guarantee every egg to come true. Now tell me some scientific reason why the pecan will not breed the same way. It is reasonable to suppose that a hen running in a mixed flock with a male of her own breed that some of her eggs will hatch true, if you set all of her fifty or more eggs she lays before she sets; but as you set only a dozen or so, you may not get one of this dozen to come true. This same rule will apply to the pecan. If you plant all the nuts from the tree, it is reasonable to suppose that part of them have been pollenized from the male blooms of the same tree, and will come true. This accounts for Mr. Risien's bad luck in his thousand seedlings. It does not take over fifteen pounds of the San Saba pecans to grow one thousand trees, and no doubt the mother tree bore forty or fifty pounds. Had he planted all these nuts and grown some three or four thousand trees, he would no doubt have found many true types of his San Saba pecan among them.

If it relates to nut culture it should be in the AMERICAN NUT JOURNAL. Please send it in.

Large Revenue From Pecans

"Few people realize that the pecan industry, although young, is the source of large revenue to South Georgia. The National Pecan Growers Association disbursed this year over \$80,000 to members who sold at the Albany exchange, but a rough estimate of the revenue from the entire crop would be \$250,000, for very few growers around Americus belong to the exchange and sell independently. Quantities of nuts are on hand yet at the exchange. These are light, not filled out and will be cracked before sold. There is a great future in pecans."—H. W. Smithwick, Americus, Ga.

Albany District Pecan Exchange

The new building, two stories and basement, of the Albany District Pecan Exchange, at Washington and North Streets, Albany, Ga., connects with an old building on the 95 x 169 ft. lot and with new equipment gives the Exchange an investment of \$40,000 after four years' operation. New grading machines of the type perfected by the Albany District Pecan Exchange itself will be installed, and the plant made capable of handling 30,000 pounds of pecans a day. The new plant has a private railroad switch and is otherwise equipped for handling its business in the most expeditious way.

The Bedess Pecan Co. has been established at Albany, Ga., by R. W. Bingham and W. W. Davies, of Louisville, Ky., and R. E. L. Spence, of Albany, with capital stock of \$30,000. Although the main office of the company will be in Albany, and provision is made for an executive office in Louisville, Ky., if found needed, the lands the company will operate are in Lee county. The company has secured about 1,700 acres in two tracts, the major portion of which is located in the western part of the county adjoining the Dawson Papershell Pecan Company property. It is the plan of the company ultimately to put the whole tract out in pecan trees.

The Macon district of Georgia which includes Cordele, Americus and adjacent territory, in which is the Daphne Pecan Farm of Dr. M. J. Keyes, is declared to be free thus far from kernel spot, case bearer or other trouble.

Foy & Shemwell, Albany, Ga., are large operators of farm enterprises including the Flint River Pecan Co., which has a grove of 2,000 acres, a large part of which is in bearing trees 15 to 16 years old.

"In place of the elm shade trees destroyed by the storm soft shell pecan trees should be planted. The pecan trees afford excellent shade, grow fast and bear in six to seven years, thereby not only furnishing adequate shade but the nuts as well," said Ned Holman today.—Guthrie, Okla. Leader.

The 1923 convention of the Georgia-Florida Pecan Growers' Association will be held in May at Waycross, Ga.

A SAFE, PROFITABLE INVESTMENT

All or part, 200-acre bearing Pecan orchard, 13 years old, best grafted varieties, rich alluvial soil, natural pecan region, best part of Louisiana. On graveled highway; near railroad station, post office and school. \$700 Per Acre. Terms. Write Owner.

J. T. MCKINNON, ZWOLLE, LA.

THE ALMOND

REORGANIZATION

The California Almond Growers Exchange whose fate has been "in the balance" for three months, has been organized at a meeting of 200 growers and proxy representatives of 2300 more who have signed five-year crop pooling contract.

The present board of officers was continued in office until January, 1923, and a committee of nine appointed to frame by-laws, with H. G. Boyce of Winters, chairman, and D. S. Nelson of Arbuckle secretary.

T. C. Tucker, manager of the exchange, warned members that the National Confectioners' Association had opened fire on the almond tariff and advised them to give every effort to save the five and fifteen cent tariff schedule now before the senate. Mr. Tucker was instructed to start immediately his sales campaign to move the 1922 tonnage.

Educational Work in Texas

Dr. F. R. Brison, pecan specialist from A. & M. College, Tex., is demonstrating pecan budding in various parts of the state. Dean E. J. Kyle of the college is giving illustrated lectures on the pecan at various points.

Dean Kyle shows that San Saba County is the center of the pecan belt in the production of fine quality pecans, being surrounded by counties next in order as pecan producers as follows: Brown, Lampasas, Llano, Kimble, Mason and McCulloch in the order named. These counties, together with Mills County, completely enclose San Saba County, the leading producer of all.

While Texas produces more pecans than all other areas combined, this state is sixth in the production of improved varieties of pecans—there being only 13 states where pecans can be grown commercially.

They're arguing about nuts up in Idaho. The Wendell, Ida., Irrigatoralist said editorially recently.

Speaking last week of black walnut growing on the North Side tract, we have been called in a number of places since last week's paper came out. W. N. Seitz says he raised walnuts on trees he had on his farm in 1920 and brought us in a sample of his crop last year. These same walnut trees now adorn the public park in Wendell, having been given to the Civic club by Mr. Seitz. Mrs. L. N. Holbrook reports that last year on their place they gathered a gallon of nuts from their walnut trees and a few years before. Reports also reach us that Mrs. O. H. Howell gathered a crop of over two gallons of walnuts from their trees in 1921. I guess that will hold you for a while, Senator.

W. B. Hooper, Carpinteria, Cal., has been named as extension specialist to work with the walnut growers of the State in conducting field studies looking toward the solution of many of the cultural problems now confronting the industry. He will be located at Riverside.

Manager T. C. Tucker, of the Cal. Almond Growers' Exchange, was in New York city recently calling upon the trade. California will have a large crop this year. The foreign crop is also to be large.

At Godfrey, Ill.

Godfrey, Ill., July 11—The present outlook is for a full crop of almonds, half crop walnut, light crop of hickory and pecan. Chestnut full crop.

There was a heavy bloom on all nut trees but for some reason many trees failed to pollenize. E. A. RIEHL.

American Fruits Company's Library Opportunities

PRACTICAL BOOKS ON HORTICULTURE, NUT GROWING, NURSERY PRACTICE

Any of the following books will be sent on receipt of price by AMERICAN FRUITS PUB'G CO.,
123-125 Ellwanger & Barry Bldg., ROCHESTER, N. Y. Prices subject to change.

American Apple Orchard By F. A. Waugh.....	\$1.90	Insect Book—Dr. L. O. Howard... 6.30	Parsons on the Rose—Parsons..... 1.75
American Fruit Culturist By John J. Thomas.....	3.65	Insects and Insecticides—Weed.... 2.15	Peach Culture—J. A. Fulton..... 1.65
American Fruit Farm—F. N. Thorpe	2.65	Insect Pests of Farm, Orchard and Garden—Sanderson and Pearls.. 4.65	Peach Growing—By H. P. Gould... 2.65
American Grape Culture—Munson..	2.65	Irrigation Farming—L. M. Wilcox. 2.40	Pear Culture for Profit—Quinn... 1.35
American Grape Growing and Wine Making—George Husmann	2.15	Irrigation for the Orchard—Stewart 1.75	Picturesque Gardens—Henderson.. 2.25
American Horticultural Manual By Budd-Hansen, two vols.....	3.15	Land Drainage—Joseph H. Jeffrey 2.15	Plant Breeding—By Dr. L. H. Bailey 3.40
American Peach Orchard—Waugh. 1.90		Landscape Gardening—Art of Landscape Architecture—Parsons.... 3.65	Plant Propagation: Greenhouse and Nursery Practice—M. G. Kains 2.40
Bulbs and Tuberos Rooted Plants. 2.15		Landscape Gardening—Downing's Famous Work—10th Edition—Revised by Waugh..... 6.00	Plant Physiology—B. M. Duggar... 3.00
Bush Fruits—By F. W. Card..... 3.15		Landscape Gardening—House and Garden's Book of Gardens, 9 1/2 x 12 1/2, 400 Illustrations..... 5.15	Practical Forestry—A. S. Fuller... 2.15
California Fruits and How to Grow Them—E. J. Wickson, A. M.... 4.15		Landscape Gardening—Kemp—Revised by F. A. Waugh..... 2.15	Practical Fruit Grower—Maynard.. 1.00
Citrus Fruits—J. E. Coit..... 3.40		Landscape Gardening—Maynard... 2.65	Principles of Agriculture—Bailey.. 2.00
Commercial Apple Industry of North America	3.65	Landscape Gardening—The Small Place—By Elsa Rehmann..... 3.65	Productive Orchard—F. C. Sears 2.65
Cyclopedia of Agriculture By E. V. Wilcox-C. B. Smith... 3.75		Landscape Gardening—Cridland... 2.65	Principles of Fruit Growing—Bailey 2.65
Dwarf Fruit Trees—Waugh..... 1.00		Landscape Gardening—The Complete Garden—Albert D. Taylor. 6.15	Principles of Pruning—Kains..... 2.65
Farm Bureau Movement—O. M. Kile 2.15		Landscape Gardening—O. C. Simonds	Pruning Manual—By L. H. Bailey. 2.65
Fertilizers and Crops By Dr. L. L. Van Slyke..... 3.40		Manual American Grape Growing—Hedrick	Putnam's Garden Hand Book..... 3.00
Fertilizers—Edward B. Voorhees... 2.65		Making Horticulture Pay—Kains... 1.90	Quince Culture—W. W. Meach.... 1.35
Field Notes on Apple Culture By Dr. L. H. Bailey.....	.90	Manual of Fruit Diseases L. R. Hessler, H. H. Whetzel.. 3.15	Roses—How To Grow—Robert Pyle 1.35
First Principles of Soil Fertility By Alfred Vivian.....	1.50	Manual of Fruit Insects M. V. Slingerland, C. R. Crosby 3.90	Rose—H. B. Ellwanger..... 1.40
Forcing Book—By Dr. L. H. Bailey... 2.15		Manual of Gardening—L. H. Bailey 3.40	Sales Promotion By Mail..... 2.15
Fruit Growing in Arid Regions.... 2.75		Manual of Tree Diseases—Rankin. 3.40	Small Fruit Culturist—A. S. Fuller. 1.75
Fruit Garden—P. Barry..... 2.15		Manual of Vegetable Garden Insects By Crosby & Leonard..... 2.90	Soils—E. W. Hilgard..... 4.25
Fruit Harvesting, Marketing—Waugh 1.90		Manures and Fertilizers—Wheeler. 2.65	Solle—Lyon-Fippin-Buckman 3.40
Fruit Insects—Crosby..... 3.90		Modern Fruit Marketing—Brown... 1.90	Solle—F. H. King..... 2.40
Fumigation Methods	1.90	Modern Propagation Tree Fruits—B. S. Brown..... 1.65	Solle—By Charles W. Burkett..... 1.90
Gardening for Pleasure—Henderson 2.15		Nature's Garden—Neltje Blanchan 6.30	Spraying Crops—C. M. Weed..... 1.00
Gardening for Profit—Henderson... 2.15		Nursery Manual—Dr. L. H. Bailey. 2.65	Standard Cyclopedia of Horticulture
Grape Growers Guide—Chorlton... 1.65		Natural Style Landscaping—Waugh 2.65	Edited by L. H. Bailey. In six volumes. 3,600 pages. 4,000 text engravings. 96 sepia half-tones. 500 collaborators. May be had on installment payments 40 00
Grape Culturist—A. S. Fuller..... 2.15		Manual Tropical and Sub-tropical Fruits—Popenoe	Strawberry in North America—S. W. Fletcher
Greenhouse Construction—Taft 2.40		Nut Cultivist—Andrew S. Fuller... 2.15	Strawberry Growing—S. W. Fletcher 2.40
Greenhouse Management—Taft..... 2.40		Nut Growing: Latest Information; Guide to Propagating—By Robert T. Morris	Success in the Suburbs—John R. McMahon
Hedges, Windbreaks, Shelters..... 1.00		Ornamental Gardening—E. A. Long 2.15	Successful Fruit Culture By Samuel T. Maynard..... 1.75
How To Grow Roses—Robert Pyle. 1.35		Principles of Floriculture..... 3 40	Surgeon's Philosophy—Dr. R. T. Morris
Injurious Insects—F. L. Washburn 2.65			Systematic Pomology—Waugh..... 1.90
Insects of Economic Importance—Herrick	2 15		Ten Acres Enough—I. P. Roberts.. 1.75

A paper which gives the best value for the money to the reader will give the best value to the advertiser as well. I don't think there is any argument about the soundness of this view.—H. Dument, Chicago, Ill., in Printer's Ink.

WANTED Names and Addresses of Owners of Groves of Native Nut Trees in Northern States.

In the interest of Northern Nut Culture this Journal desires the above information to serve as a basis for extension of Nut Culture.

Readers will confer a favor by sending us lists of names and addresses of those who have stands of nut trees on their property, (with some account of productivity if practicable). Black walnut, English walnut, butternut, hickory, chestnut, filbert, etc.

American Nut Journal P.O. Box 124 Rochester, N. Y.

BUDED and GRAFTED Nut Trees

Start right with my hardy Pennsylvania grown trees and be assured of success. Attractive Catalogue Free.

I have this season a fine lot of stake trained Pecan, English Walnut, Black Walnut and Persimmon trees budded on root pruned transplanted stocks, that will please you and that will transplant easily and safely. Write for catalogue.

J. F. JONES, The Nut Specialist
LANCASTER, PA.

THIS SPACE
\$2.50 Per Month Under Yearly Contract
Under less than yearly term:
\$2.80 Per Month

O. A. ROSS
PAPER SHELL PECAN GROVE EXPERT
Groves appraised. Expert Supervision. Nut crops harvested and shipped.
118 Front Street, Albany, Georgia

WANTED
BACK NUMBERS OF THE
AMERICAN NUT JOURNAL
Will pay 50c each for a copy of numbers 2, 3 and 4 of Volume 1.
Address X, care this journal.

CONSULTING TROPICAL HORTICULTURIST and TREE EXPERT

HARVEY C. STILES

COLUMBIA, TEXAS

Specializing in Pecans, Grapefruit, Avocados, and Landscape Development. Long experienced expert for—and present active director of—many such large projects throughout tropics and semi-tropics. Examinations, Reports, Plans, Specifications and Estimates. Correspondence suggested.

Have You Nuts to Sell?

HICKORY NUTS BLACK WALNUTS
BUTTERNUTS CHESTNUTS

Hundreds of buyers are asking where the nuts can be obtained in quantity. Place your Sale Advertisement in the AMERICAN NUT JOURNAL for quick returns. \$2.80 per inch.

39 State St., Rochester, N. Y.

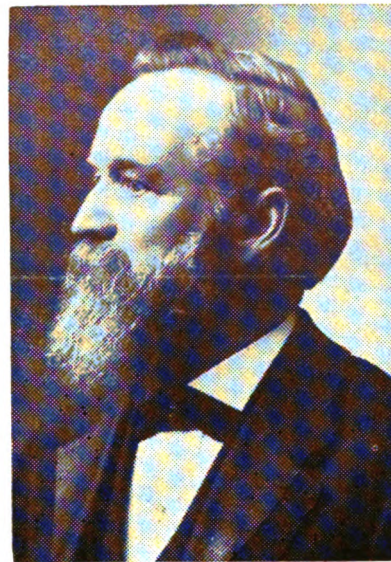
American Nut Journal

**DEVOTED TO NUT GROWING INTERESTS
GENERALLY THROUGHOUT THE AMERICAS**

Vol. XVII, No 2

AUGUST, 1922

Per Copy 20c.



COLEMAN K. SOBER

Died at Lewisburg, Pa., Dec. 1921

Grower of Paragon Chestnuts on an extensive scale. Inventor of chestnut husking machine. Lumber operator. Patron of horse-racing. Fancy shot and expert marksman. Member Northern Nut Growers Association.

39 STATE ST.



ROCHESTER, N. Y.

American Fruits Publishing Co.

THE NORTHERN NUT GROWERS' ASSOCIATION

THIS Association comprises among its members those most skilled in the propagation of nut trees and those most advanced in nut growing. It also comprises among its members many who are not experts, and who become members for the purpose of learning. It welcomes to membership both the expert and the learner. It is not organized for profit, its aim being the acquisition and dissemination of knowledge of nut trees and nut growing. A number of its members have expended much time and considerable money in experimental work, and have given the results to the Association. This work is still going on.

The proper use of nuts is not generally understood. They are usually used as a delicacy, whereas they are a most concentrated food. Careful experiments have shown that they will successfully replace meat in the diet even of such animals as wolves and tigers. The food value of nuts from an acre of ground is many times that of the beef that can be produced on the same ground, and nut growing seems destined to solve the problem of the diminishing supply of meat and the increasing demand for it. Probably the most practical use of nuts is to partially replace meat rather than to replace it altogether.

In Europe, land with bearing nut trees on it brings a higher rental than the best cultivated land, and the same will be true in America when the value of nut tree crops is more generally recognized. In certain sections of the South, pecan trees bearing fine nuts have enormously enhanced the value of the land on which they stand, and it is only a question of a few years when this will be true in other sections of the country. It will be so when the orchards of nut trees, now being planted, begin to bear. It is confidently believed by the Association that nothing can be grown which will give as great returns, for the labor expended on them, as bearing nut trees.

Nut trees will not come true from seed any more than fruit trees will. A fine nut, when planted, will almost certainly cause a tree to grow which will bear very inferior nuts, but this same tree will bear fine nuts if it is grafted or budded with scions or buds from a tree bearing fine nuts. While fruit trees have been successfully grafted and budded for many years, it is only within a few years that it was possible to do this with nut trees. This can now be done quite successfully, however, and the methods of doing it are being steadily improved. Young trees, grafted or budded to the fine varieties of nuts that have been discovered can now be procured from a few nurserymen making a specialty of growing them. The Association has a list of such nurserymen which will be mailed free on request.

While fine varieties of northern pecans, hickories, black walnuts, etc., have been discovered and are being propagated, it is doubtless true that all the fine nut trees in the country have not come to the attention of the Association and hence it is seeking each fall to learn of other meritorious nuts, and, to further this, prizes have been offered for northern pecans, hickories, black walnuts, butternuts, hazels, English walnuts and Japan walnuts.

It is perhaps well to state here that nut growing, being the newest branch of agriculture, at least in America, is one about which everything is not known, and the best varieties of each particular kind of nut for each section is something that has not been definitely worked out. It is being done, however, and progress in growing nut bearing trees and shrubs is so rapid that a person whose knowledge is two or three years back is behind the times. This is in marked contrast with other branches of agriculture where good cultural methods and varieties were worked out years ago. In the matter of nut growing almost the only way to get the latest information is by reading the American Nut Journal and through the Secretary's office. There is no place where up-to-date information on nut growing is to be found as it is in the Secretary's office, and his services are free to members.

Even though the facts require it to be stated that our detailed knowledge of nut growing is not as comprehensive as that on most other agricultural subjects, yet it must not be understood that it is not sufficient so that planting nut trees must be regarded as so difficult that few can succeed. Anyone, who plants the right kind of nut trees, in good soil, and gives them proper attention till they become established will have something that will not only be a source of pleasure but a source of constantly increasing income. The English walnut, hazel and almond orchards of Europe and California and the pecan orchards of Southern United States have amply demonstrated this for these sections, and the nut trees planted in the north which are just coming into bearing have convinced careful observers that the fine nut trees in the north will do likewise. Therefore the Association wishes to emphasize that the important thing to do now is to PLANT THE FINE VARIETIES OF NUT TREES THAT WE NOW HAVE.

Membership in the Northern Nut Growers' Association is as noted below:
 Membership for one year, including copy of Current Report.....\$2.00
 Membership for one year, including copy of the Current Report and subscription to the American Nut Journal for one year, if sent to an address in the United States 3.25
 Membership for one year, including copy of the Current Report and subscription to the American Nut Journal for one year, if sent to an address in Canada or abroad 3.75
 The Current Report is the 10th. Copies of the 2d, 3d, 4th, 5th, 6th, 7th and 8th can be supplied at 50c each to members, or \$1.00 each to non-members. The 9th report has not yet been issued.

The American Nut Journal is the only paper devoted exclusively to nuts and nut growing. Subscription to it, without membership in the Association, is \$2.00 per year or \$2.50 if sent to Canada or abroad.

WILLARD G. BIXBY, Treasurer, 32 Grand Ave., Baldwin, Nassau Co., N. Y.

H. R. Mosnat, Chicago, Ill., is especially interested in black walnuts. Regarding the Northern Nut Growers Association he says: "There is a great work to do. The sooner it is started the better and now is the time."

FOR SALE

In the Georgia Paper-shell Pecan district: Two groves; one of 5 acres, other 7½ acres. Seven years and six years old respectively.

FRANK G. NIEBLING,
 Rochester, N. Y.

An Important Discovery

Dr. Robert T. Morris, a New York surgeon of distinction and an enthusiastic horticulturist for recreation, noting the wonderful effect of paraffin in human and animal surgery, readily saw that paraffin should be much better than grafting wax as it keeps out the heat and lets in the light and has other qualities especially favorable for healing. It at once proved a success that surpassed his expectations. Whereas, according to old methods, the largest per cent of the grafts died, now the largest per cent of the grafts live. Before the discovery of

From Secretary's Office

Once more I wish to beg all readers of the Journal, to whom northern nut culture means anything good, to contribute something to the success of the 13th annual convention at Rochester, on September 7th and 8th. Have you raised a nut on one of your Nursery trees? Send it to any officer of the association for an exhibit. Everything is of interest. Have you found a native shagbark, hazel, black walnut that has remarkable nuts? Send them in. Have you an idea, have you said to your wife, "Why the dickens doesn't the Northern Nut Growers Association do this, why doesn't our infernal secretary do that?" Well, send it in. Expose him. Don't let it be said that you have contributed nothing to the advance of the art of nut culture. Best of all, come to the convention with your exhibits in your gripack and your ideas at your tongue's end.

* * *

I expect to fetch with me native chinquapins, Van Fleet hybrid chinkapins, Japanese chestnuts and Chinese chestnuts, C. mollissima, and shagbark hickories from five grafted trees that are bearing. Also Ridenhauer almonds and several varieties of hazels, all from my own trees.

Today (Aug. 11) I find some clusters of four or fewer pecans growing well on the great Hartford pecan. They are nearly an inch long and, if the gray squirrels don't get them, we shall know what they are like. The squirrels are already knocking down the black walnuts. In Washington they get all the Persian walnuts in the Capitol grounds in June. They have a pretty taste in green nuts. In that the Parisians imitate them for green almonds, and even green hazels, are a luxury dessert. Here is an open field for the almond grower in the East. Mr. Bartlett and Mr. Barrows of Stamford visited my place last Sunday and together we sampled the green Ridenhauers and found them of good size, full meat and of excellent quality. As Mr. Bixby says, "What's the matter with the Ridenhauer?"

W. C. DEMING.

Ga.-Fla. Assn. Addresses

Secretary-Treasurer J. Slater Wight has issued the Proceedings of the Annual Meeting of the Georgia-Florida Pecan Growers' Association, held at Thomasville, Ga., May 24-25, 1922. This is commendable promptness—the official proceedings printed and in the hands of the members in a little more than sixty days after the meeting. A summary of the proceedings appeared in the American Nut Journal. No effort has been made to present the discussions and action taken at the meeting; the report in question simply presents the formal papers and addresses of the convention, with a list of the members.

covering the whole scion to prevent evaporation, the best grafters did well to get two per cent of hickories to take. Since the discovery and the use of melted paraffin as the covering, Dr. Morris has gotten from seventy to eighty per cent of successful takes on hickories. In the case of apples and pears and peaches and other species that heal easily and quickly, one should have practically a hundred per cent of takes.

If it relates to nut culture it should be in the AMERICAN NUT JOURNAL. Please send it in.

AMERICAN NUT JOURNAL -- AUGUST, 1922

EDITORIAL DEPARTMENT—Communications on any subject connected with Nut Growing and Distribution are cordially invited by the editor; also articles on this subject. We shall be pleased to reproduce photographs of trees of interest, methods and scenes connected with the Nut Industry; portraits of individuals, etc. Suggestions are cordially welcomed.

ADVERTISING—Advertising forms close on the 10th of each month. If proofs are wanted, copy should be in hand on the 1st.

Advertising rate: 20 cents per agate line; \$2.50 per column inch for any amount of space.

Advertisements that do not represent reliable concerns will not be accepted.

SUBSCRIPTIONS—The "American Nut Journal" will be sent to any address in the United States for \$2.00 a year; to Canada or abroad for \$2.50 a year. Three years: In United States, \$5.00; Canada, \$6.50.

Add ten cents for exchange unless bank draft, express or postal money order is used.

WHAT THIS JOURNAL STANDS FOR—Reliable information on all phases of the Nut Industry. It is for the advancement of Nut Growing in general; it is in no way confined to the interest of a particular kind of nuts, nor of a particular section. It is broad in scope and absolutely independent. The aim of "The American Nut Journal" is to stimulate thousands of persons into developing interest in one of the greatest food supplies of the future—to line the roadsides and fill the waste places with trees of a sort which yield dollars worth of fruit every year instead of the mere bunches of leaves resulting from present shade and ornamental planting. At the same time it will record the progress of the industry, the latest descriptions in the note book of the biologist and plant physiologist, the rapidly expanding knowledge of methods, the increasing acreage, and in short the news as it develops of an industry whose importance is recognized by an increasing number of persons in all sections.

Entered as second-class mail matter June 6, 1914, at the post office at Rochester, N. Y., under the Act of March 3, 1879.

AMERICAN FRUITS PUBLISHING COMPANY, Inc.

Ralph T. Olcott, Editor and Manager

121-123-125 Ellwanger & Barry Bldg., Rochester, N. Y.

Classified Business Announcements In This Issue.

Alexander Woldert Co....."Squirrel" Nut Cracker.....	21	"Nut Growing".....New Book.....	20
Atlanta Paper Company.....Corrugated Pecan Cases.....	20	Nut Information.....Special Topics.....	15
Bassett, W. W.....Pecan Trees.....	22	Nuts as Staple Food.....Dr. J. H. Kellogg.....	15
Bechtel's Pecan Nurseries...Grafted Pecan Trees.....	22	"Nut Trees for the North". Expert Advice.....	15
Carol Plantation Nurseries...Grafted Pecan Trees.....	24	Pecan Sales Company.....Cash for Paper-shell Pecans.....	21
Carpenter, J. H., Jr.....Florida Pecan Grove for Sale.....	20	Simpson Nursery Co.....High Grade Pecan Trees.....	22
Florida Nurseries.....Pecan Trees.....	22	Stiles, Harvey C.....Tree Expert.....	24
Indiana Nut Nursery.....Northern Pecan Trees.....	22	Stone, B. W.....Pecan Trees, Nuts, Groves.....	22
Jones, J. F.....Grafted Pecan Trees.....	24	Texas Pecan Nursery.....Budded Pecan Trees.....	22
Keso Nurseries....."Buddy Nut Trees"—Hybrid.....	20	Vanderbelt, Dr. C. R.....Pecan Farm for Sale.....	20
Lancaster Nut Nurseries...Northern Nut Trees.....	24	Wanted.....Names of Grove Owners.....	24
Logical Market Place.....For Selling Nuts.....	21	Wilkinson, J. F.....Grafted Pecan Trees.....	22
Northern Nuts.....Sources Wanted.....	24	Woodson, Robert E.....Pecan Cracking and Grading Machines.....	23

IMPORTS OF NUTS INTO THE UNITED STATES, FOR CONSUMPTION, DURING THE LAST THIRTEEN YEARS
(Compiled by Bureau of Commerce and Navigation, Department of Commerce, Especially for the "American Nut Journal.")

KIND	1907	1908	1909	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919
Almonds—not shelled.....lbs	5,714,207	8,515,688	2,120,632	6,819,066	3,762,654	5,242,563	2,363,860	5,501,059	4,684,598	2,368,369	4,901,168	6,149,374	7,438,086
Shelled.....lbs	8,717,952	8,556,162	8,538,054	10,495,750	12,160,636	11,662,988	12,655,057	13,896,621	12,168,153	13,210,688	19,180,358	21,544,757	28,007,308
Apricots and peach kernels lbs.				27,854	13,531	7,939	18,769	18,572	67,164	11,926	250,075		
Coconuts in the shell.....Dollars	\$1,349,380	\$1,439,589	\$1,246,463	\$1,298,970	\$1,704,262	\$2,012,203	\$1,793,713	\$2,150,500	\$1,593,666	\$1,661,328	\$2,583,660	\$2,490,368	\$4,063,368
Coconut Meat broken or Copra not shredded, dessicated or prepared.....lbs.	7,064,559	14,121,576	23,742,518	20,830,539	38,081,984	64,505,787	34,283,592	44,459,158	66,660,382	106,507,765	247,043,127	436,649,332	266,687,761
Dessicated, shredded, cut or similarly prepared.....lbs.	3,476,698	5,584,682	5,461,602	5,985,308	6,661,850	5,396,485	6,826,095	9,307,024	5,866,806	7,947,390	10,491,796	20,309,909	39,637,074
Cream and Brazil.....bu.	290,633	310,418	409,644	461,496	277,679	21,601,008	11,938,139	11,431,631	21,483,319	12,486,217	16,288,028	11,282,088	43,076,308
Filberts—not shelled.....lbs.	9,960,280	8,997,246	7,365,837	10,026,961	10,084,967	8,375,960	8,586,278	10,836,072	10,922,248	10,003,562	16,468,547	7,432,594	16,747,349
Shelled.....lbs.	1,553,332	1,343,594	1,384,689	1,413,391	2,332,606	1,368,835	1,450,630	1,798,147	1,722,705	1,269,540	2,280,757	4,245,565	3,776,596
Marrons, crude.....lbs.				10,270,398	9,968,879	14,845,345	10,157,321	18,849,257	12,549,959	15,754,796	6,270,030		5,021,146
Olive nuts, ground.....Dollars	\$1,016	\$1,027	\$680	\$478	\$236	\$206	\$342	\$385	\$25	\$112	\$420		
Palm and Palm Nut Kernels.....Dollars	\$3,350	\$2,250	\$2,752	\$6,907	\$5,744	\$7,970	\$4,872	23,127	31,800	1,104,565	626,435	16,905,313	5,610,066
Peanuts or Ground Beans.....lbs.	10,432,828	6,498,202	7,326,371	11,297,172	11,055,823	12,690,433	12,140,612	17,298,778	14,075,367	9,623,411	7,710,662	1,970,797	5,067,884
Shelled.....lbs.	4,780,054	1,775,946	1,302,919	16,089,919	7,821,505	3,127,829	7,823,173	21,819,101	11,695,507	18,739,886	27,548,688	67,746,531	24,179,687
Pecans.....lbs.	1,118,071	1,480,289	9,349,460	2,433,037	2,607,227	1,803,434	2,621,161	2,032,539	1,266,382	4,076,808			
Walnuts—not shelled.....lbs.	23,036,646	21,427,853	17,432,885	23,269,974	21,146,116	22,208,845	16,363,046	16,134,211	20,985,326	22,610,418	17,177,892	3,304,003	21,335,078
Shelled.....lbs.	7,199,988	7,098,958	8,781,908	10,960,968	11,244,054	10,713,286	10,093,622	11,676,053	10,552,956	13,446,790	12,257,563	9,707,401	10,860,589
All other shelled or unshelled, not specially listed.....lbs.	10,598,186	10,441,327	9,938,337	3,584,544	2,962,663	3,600,989	3,600,056	7,426,313	3,272,492	2,772,589	2,760,634		
Total of nuts imported.....Dollars	\$9,315,891	\$9,563,742	\$8,549,987	\$12,775,196	\$14,265,572	\$15,626,483	\$13,508,307	\$19,815,713	\$16,965,244	\$20,594,434	\$33,667,668	\$49,980,288	\$7,499,04

a—pounds.

Nut Culture Information

Reprint folders on topic discussed in American Nut Journal. 10 Cents Each

Grafting and Budding the Walnut—U. S. Dept. Agriculture.
Pecan Areas of the United States—W. P. Reed.
Walnut Trees For New England—Dr. Robert T. Morris.
Some Walnut Varieties—Dr. L. D. Batchelor.
Chip Buds For Nut Trees—Charles L. Edwards.
Grafting, Budding, Topworking—Dr. W. C. Deming.
Breeding Chestnuts for Disease Control—U. S. Dept. Ag.
Advent of Nuts as Staple Food—Dr. J. H. Kellogg.
Underworking Nut Trees—Charles L. Edwards.
The Ubiquitous Black Walnut—T. P. Littlepage.
Average Yield of Pecan Orchard in S. W. Georgia.
Value of Nuts As Food—Dr. W. C. Deming.
Improved Black Walnut a Good Investment—Henry Stabler.
Status of Pecan Industry—C. A. Reed, U. S. Nut Culturist.
Sources of Supply of Hazel Nuts—Bulletin Imperial Institute.
Top-Grafting the Walnut Tree—Ferd Groner.
Black Walnut As a Meat Producer—Henry Stabler.

Outline of Northern Nut Culture Activity—Dr. W. C. Deming.
Establishing the Filbert Grove—George Dorris.
Top-Working Northern Pecan Trees—J. F. Wilkinson.
Nut Trees for Highways and Public Places—W. S. Linton.
American Nut Culture—24-page Pamphlet Survey.
East Texans Reap Fortunes on Pecans.
Hazel Blight—Dr. Robert T. Morris.
American Nut Industry—C. A. Reed, Nut Culturist.
What Nuts to Plant in Northern States.
Pecan Rosette; Practical Treatment—W. A. Weaver.
English Walnut: Where To Plant It.
Nut Tree Grafting by an Easy Method—Dr. Robert T. Morris.
Purchase of Chestnut Tree With Reference to Blight—G. F. Gravatt.
Quick Results in Pollenizing Pecans—E. E. Rislen.
Nut Trees to Reduce Food Costs—Chas. Lathrop Pack.
How To Guard Against Faulty Nuts—Harvey C. Stiles.
The Romance of the Pinon Nut Industry in New Mexico.
Soil Fertility; Fertilizer Problems in Pecan Culture—J. J. Skinner, U. S. Department Agriculture.
The Future of the American Grown Filbert—Richard H. Turk.

AMERICAN FRUITS PUBLISHING CO., 39 State Street, Rochester, N. Y.

CONVENTION PROGRAM NORTHERN NUT GROWERS ASSOCIATION AT OSBORN HOUSE, ROCHESTER, N. Y., SEPTEMBER 7-9

Thursday Morning, September 7

9:30 a. m.—Invocation, Rev. Ralph S. Cushman; Address of Welcome, Mayor Clarence D. VanZandt; Response, Bishop David L. Ferris; President's Address, James S. McGlennon, Rochester, N. Y.; Report of the Secretary, Dr. Wm. C. Deming, Hartford, Conn.; Report of the Treasurer, Willard G. Bixby, Baldwin, N. Y.; Reports of Standing Committees; Appointment of Committees; "The Plane and Screw Driver in Nut Tree Grafting," Dr. Robert T. Morris, New York City.

Thursday Afternoon

2:30 p. m.—Trip to Highland Park, Byzantine Hazel.

3:30 p. m.—Trip to Maplewood Park, Laney Hickory.

4:00 p. m.—Trip to McGlennon-Vollertsen Filbert Nursery, Greece, N. Y.

6:00 p. m.—Dinner at New Osborn House.

Thursday Evening

8:00 p. m.—"Opportunities for Women in Nut Culture," Mrs. W. D. Ellwanger, Brooks Grove Farm, Wayne Co., N. Y.; "Possibilities of Commercial Nut Culture," J. M. Patterson, Putney, Ga.; Address, Mrs. Wm. C. Deming, Hartford, Conn.; "Improved Varieties of Nuts Ready Now for Northern Orchards," Willard G. Bixby, Baldwin, N. Y.; "The Use of Nuts as Food," Mrs. J. M. Patterson, Putney, Ga.; "Pioneer Experiences and the Outlook," Dr. Robert T. Morris, New York City; "The Value of Nuts as a Dietary Staple," Dr. J. H. Kellogg, Battle Creek, Mich.; "Nut Trees in the North," John Dunbar, Asst. Superintendent of Parks, Rochester, N. Y.

Friday Morning, September 8

9:30 a. m.—"Topworking the Hickory," Dr. Wm. C. Deming, Hartford, Conn.; "Varieties," Willard G. Bixby, Baldwin, N. Y.; "The English Walnut in the East," Albert C. Pomeroy, Lockport, N. Y.; "Nut Trees for Roadsides and Memorial Planting," Wm. S. Linton, Saginaw, Mich.; "A Uniform Roadway Planting Law," State Senator Harvey A. Penney, Saginaw, Mich.; "The Blight-Proof Propagated Filbert," Conrad Vollertsen, Rochester, N. Y.; "Nut Culture in Canada," Prof. James A. Neilson, Guelph, Canada; "The Canadian 'Johnny Appleseed'," G. H. Corsan, Toronto, Canada; "The Nurseryman's Interest in Nut Culture," John Watson, Rochester, N. Y.

Friday Afternoon

12:30 p. m.—Group photograph on bank of Genesee River in front of Hotel.

2:00 p. m.—Trip to Brooks Grove Farm, the country estate of Mrs. W. D. Ellwanger.

5:00 p. m.—Luncheon on grounds of Mrs. Ellwanger's estate, shore of Lake Ontario.

Friday Evening

8:00 p. m.—Unfinished Business; Election of Officers; Selection of place for next convention.

Saturday Morning, September 9

10:00 a. m.—Nut Tree Planting by the Association. Walnut Trees from the George Washington Estate, Mt. Vernon, supplies by Wm. S. Linton. At a point selected by Assistant Park Superintendent Dunbar. Address by Dean Franklin Moon, New York

State College of Forestry, Syracuse, N. Y., and Mrs. Harper Sibley, Rochester, N. Y.

11:00 a. m.—Demonstration of Budding and Grafting by J. F. Jones, Lancaster, Pa.

Saturday Afternoon

1:00 p. m.—National Horse Show at Exposition Park; Industrial Exposition.

Optional Attractions

Motor Ride to Pittsford, N. Y.

Ontario Beach Park.

Durand Eastman Park.

Eastman School of Music.

Art Gallery.

Barge Canal Harbor.

Nurseries—Largest Center in the Country.

Persian Walnut Grove of Adelbert Thomson, East Avon, N. Y., 220 trees. Largest grove east of California.

Pomeroy English walnut farms, Lockport, N. Y.

Niagara Falls.

Convention Headquarters—Osborn House. American plan: \$3.50 per day upward.

Hotel reservations should be made promptly on account of Horse Show week requirements.

Assembly Hall for Convention Sessions in the hotel. Space for exhibits will be provided.

A visit to the McGlennon & Vollertsen Filbert Nursery, near Rochester, N. Y., by the editor this month gave assurance that this Nursery will be one of the leading features of the 1922 convention. It is unique in being the only undertaking of the kind east of the Pacific Coast and it has been remarkably successful. The filbert plants (of propagated imported varieties) are thrifty in the extreme, blight proof to all appearances, hardy in the highest degree and promise to be prolific bearers, as most of the plants in Nursery rows are bearing. All members of the Northern Association will be especially interested in this feature.

The plantation of Persian and black walnuts and Paragon chestnuts on the Brooks Grove Farm of Mrs. W. D. Ellwanger in Wayne Co., N. Y., which those at the convention are to visit on the second day will interest all. Mrs. Ellwanger has only just begun nut planting on her farm.

Prof. U. P. Hedrick, Geneva, N. Y., will be in Europe at convention time. E. A. Riehl, Godfrey, Ill., expects to be present as does G. H. Corsan, Toronto, Canada. The latter has thrifty nut trees at his Canadian home. He raised a peck of shelled Canadian chestnuts last fall. He gave two lectures on nut growing, in New York last winter. Judge W. O. Potter, Marion, Ill., cannot be present. He is still actively interested in nut growing. T. C. Tucker, manager California Almond Growers Exchange, cannot attend the convention, but sends best wishes and says that Prof. Ralph H. Taylor will probably represent the Exchange at the convention.

If it relates to nut culture it should be in the AMERICAN NUT JOURNAL. Please send it in.

The C. K. Sober Chestnut Groves

Coleman K. Sober, Lewisburg, Pa., died last December, aged 79 years. He was a highly respected citizen, a well-known figure in Central Pennsylvania, the producer of the Paragon chestnut on a large scale, a horseman of wide acquaintance, heavily interested in lumber and mining operations and a crack shot and fancy marksman. Mr. Sober descended from a family which settled in Northumberland county, 150 years ago. He was born at the old homestead, seven miles from Shamokin, Nov. 24, 1842. He is survived by his widow, one son, W. B. Sober, and a daughter. His Paragon chestnut groves on the mountain sides of Irish Valley eight miles from Shamokin, were the outgrowth of long experimenting. The output of nuts was enormous. He invented and successfully used a power machine for removing the chestnut burs.

The sides of the Allegheny mountains are rocky, originally covered with oak, sap pine and chestnut timber. The pine and oak were cut down a generation ago, leaving the chestnut standing in places. Some of the latter was marketed and there has since grown up a second growth of this timber.

The method pursued by Mr. Sober in beginning his chestnut grove experiment was to cut down the standing trees on this land in the Fall. The following Spring young shoots would appear around the stump of the fallen tree. These shoots were grafted with scions of the Paragon nut, a chestnut that was originally raised by W. L. Shaffer, of Philadelphia, from a foreign nut planted many years ago. This Paragon nut is about five times the size of the average American chestnut. It is crisp and sweet and differs from the Italian chestnut, which is coarse and tasteless, or else has an acorn flavor which is decidedly unpleasant. The first scions used in grafting the Sober trees were obtained from W. H. Engle, of Marietta, Pa.

The first grafting was done by Mr. Sober with the assistance of a farm hand or two. Another year he employed eight Nurserymen for five weeks, each of whom grafted an average of 300 trees a day. Ninety per cent of the grafts were successful. The tongue or whip graft was used. Wax was of different colors so that the work of each man could be distinguished.

When the farm was in its prime a writer in the Phila. Press said:

Mr. Sober has expended something like \$50,000 in developing and maintaining the model farm of which his chestnut groves are the boundary. The Sobers for three generations have owned the property. The present farm consists of 600 acres, with a palatial rural home; stables, with twenty-four box stalls for the blooded horses, permanent water supply and sanitary arrangements everywhere; granaries, greenhouses, blacksmith shop, and in course of construction an immense fish pond, with trout pools and a half-mile race track. The entire property is illuminated by gas manufactured on the premises.

The principal chestnut grove stretches along the bordering mountain side for nearly a mile on the right hand side of the road. It consists of 130 acres. An eighty-acre grove crowns the hillside to the left. The roads leading to the chestnut groves are

bordered with cherry trees, forty feet apart. Between the farmhouse and the mountain are orchards of peach, pear, apple, cherry and other fruits, embracing over sixty acres.

The chestnut trees begin bearing in a very small way the second year. The third year the burrs increase in number and as high as three pints of chestnuts have been gathered from a three-year-old tree not more than six feet high. The four and five-year-old trees bear from two quarts to half a peck, and as the tree grows the yield increases proportionately.

Bearing the various titles of Captain, Colonel and Professor, Mr. Sober was widely known. Perhaps his ability as a marksman gave him his widest reputation. The American Field in January 1892 contained an illustrated account of his wonderful feats in marksmanship. His challenge to Dr. W. F. Carver to shoot an exhibition match was not accepted and after two years the forfeit money he deposited at the time of the challenge was returned to him.

Prof. Nelson F. Davis, zoologist and biologist, Bucknell University, is the author of a bulletin of 138 pages on "Chestnut Culture in Pennsylvania," in which the work of Mr. Sober is discussed in detail.

National Association Program

Secretary J. Lloyd Abbott announces the following as subjects which will be discussed at the annual convention of the National Nut Growers' Association, in Thomasville, Ga., October 3-5, 1922:

1. Best legumes for the pecan groves.
2. Latest development in control of scab.
3. Kernel spot.
4. Distribution of nut case bearer and its control.
5. Advertising pecans.
6. Co-operative marketing of pecans.
7. Supply of pecans as related to potential demand.
8. Results obtained by the National Pecan Growers' Exchange.
9. Varieties of pecans adapted to different sections.
10. Paper by Prof. H. A. Gossard, Wooster, Ohio.
11. Most desirable package for shipping pecans.
12. Ideal method of developing a pecan orchard.
13. Rosette.
14. Pedigreed pecan trees.
15. Disposal of low grade pecans.
16. What the Department of Agr. of U. S. can do for the pecan industry.
17. Can the pecan insects be economically controlled?
18. Proper distance for trees in a pecan grove.
19. Is the intercropping of pecans with fruit trees profitable?
20. Cost of producing a pecan grove to commercial bearing.
21. Types of soil best adapted to pecans.
22. To what extent do certain varieties of pecans cross-pollinate?
23. Reports of state vice-presidents on scab and nut case bearer damages.
24. Reports of standing committees.
25. Power sprayer demonstration.
26. Address by Prof. J. R. Moseby, Byron, Ga.
27. Pecan banquet.

R. C. Armstrong, Tokyo, Japan, in correspondence with Prof. Neilson, Guelph, Ont., Canada, says that residents of Japan get large, thin-shelled walnuts from Manchuria which are very good.

Dr. W. W. Frank, San Jose, Cal., has purchased 25 acres of almond orchard at Oakdale, Cal.

Takes Issue With Mr. Halbert

Editor American Nut Journal:

In the July number of the American Nut Journal there is an article by Mr. H. A. Halbert that I cannot indorse. Now I want to say right here that I have read many able articles by Mr. Halbert; in fact, he has always been one of the most interesting writers I have ever read, but this article is, to say the least, a sooner. If what Mr. Halbert advocates is true, then why try to keep breeding better hogs, better chickens, or better anything. According to Mr. Halbert, each child in a family would be exactly alike, all the same height, all the same complexion. If a brunette married a brunette, all the resulting children would be brunettes, and the same holds good if both parents married blondes.

Mr. Halbert mentions chickens, and according to the way I get his argument all of a hen's chickens ought to be pullets or roosters. The same law would apply to pecans.

Mr. Halbert is a breeder of watermelons, and I know that the seed he sends out will vary as well as the seed of any other melon, for I have tried Mr. Halbert's melon seed. It took him several years to nearly fix the type of the Halbert Honey, and I do not believe Mr. Halbert will deny this.

I live right near an orchard planted by Mr. Frank Moore. Mr. Moore went to Bend, Texas and got all his nuts from one tree. This pecan orchard is now in bearing, and no two trees bear the same kind of nuts. Several years ago, I bought a lot of pecans from Mr. Halbert of his Halbert variety. I planted a lot of these nuts. Only three of the trees went through the drouth and heat. One of the trees has very large leaves and never has borne, another has medium sized leaves and never has borne. Another has

leaves very much like the grafted Halbert trees, but the nuts are long and slim and very small, with thin shell like the parent, but so small that I have worked it over. I believe it takes seven or eight generations of careful breeding to fix the type in corn, cotton or any other farm crop; also in poultry, and then there will be outcroppings.

If Mr. Halbert has fixed the type of pecans in one generation, he has done something that no other breeder can or ever has done, and he certainly has discovered something wonderful. However, if he will tell us just how he fixed the type in his Rubber Rind melon, or fixed the type in his Halbert Honey melon, I will take out right here.

I have taken the seed from an Elberta tree that was a lone tree, no other in several hundred yards. Yet when I planted these seeds I got partly clings, partly white peaches, some pretty good and some that did not amount to anything. Other people have had this experience many times.

I wonder if Mr. Halbert were planting a large commercial peach orchard of Elbertas, if he would go to a lone tree and get the seed and plant that, no matter how fine a tree it was.

Originally the watermelon was only a pie melon. It grew in the sands of Africa. And all the melons were pie melons. Then how in the name of common sense did they ever breed these pie melons up to where the Halbert Honey melon is today? The original pie melon seed would have all come alike. Mr. Halbert does not even tell us that he has planted any amount of his Halbert pecan nuts and they all came true. It seems to me he is just guessing at this, but this is enough. I am anxious to know how Mr. Halbert bred up his melon if this is not a secret.

With best wishes to Mr. Halbert and the Nut Journal.
Stephenville, Tex. J. E. FITZGERALD.

Thirteenth Annual Meeting of the NORTHERN NUT GROWERS ASSOCIATION

At Rochester, N. Y., Sept. 7-9, 1922

Marked Progress in Northern Nut Culture Will Be Recorded in Reports, Formal Papers and Addresses. Beginnings of Commercial Orchardling in the Northern States Will be discussed by Planters and Experts.

Improved Varieties of Hickories, Filberts, Chestnuts, Walnuts, etc., and Where to Obtain the Trees for Planting. Cultural Directions.

An Exceptional Opportunity for Obtaining Practical Information in this Newest Branch of Horticulture.

Full Particulars May Be Had from

PRESIDENT

James S. McGlennon
528 Cutler Bldg., Rochester, N. Y.

SECRETARY

William C. Deming
993 Main Street, Hartford, Conn.

American Nut Journal

COVERING NUT CULTURE

NORTH—SOUTH—EAST—WEST

AMERICAN FRUITS PUBLISHING CO., INC.
50 State Street - - Rochester, N. Y.

RALPH T. OLCOTT, Editor and Manager

Official Journal Northern Nut Growers' Assn
Official Journal National Nut Growers' Assn

SUBSCRIPTION RATES

One Year, in advance.....\$2.00
Canada and Abroad.....2.50
Single Copy20

ADVERTISING RATE

Per column inch.....\$2.80
Forms Close 10th of each month

ROCHESTER, N. Y. AUGUST, 1922

NUT ASSOCIATIONS

California Almond Growers' Exchange—
President, G. W. Pierce; manager, T. C.
Tucker, 311 California St., San Francisco.

California Walnut Growers' Association—
President, C. C. Teague; secretary, W. T.
Webber; manager, C. Thorpe, 1326 East
Seventh St., Los Angeles, Cal.

Georgia-Florida Pecan Growers Association—
President, J. M. Patterson, Putney,
Ga.; vice-pres., A. C. Snedeker, Blackshear,
Ga.; sec'y-treas., J. S. Wight, Cairo, Ga.

National Nut Growers Association—Pres.,
Charles A. Simpson, Monticello, Fla.; vice-
pres., J. M. Patterson, Putney, Ga. and E.
C. Butterfield, Winona, Tex.; secy., J. Lloyd
Abbot, Spring Hill, Ala.; treas., J. Slater
Wight, Cairo, Ga. 1922 meeting, Thomas-
ville, Ga., Oct. 3-5, 1922.

National Pecan Growers' Exchange—
President and manager, William P. Bullard,
Albany, Ga.; vice-pres., J. B. Wight; secy-
treas., A. D. Galt.

Northern Nut Growers' Association—
President, James S. McGlennon, Rochester,
N. Y.; vice-pres., J. F. Jones, Lancaster,
Pa.; treas., Willard G. Bixby, 32 Grand Ave.,
Baldwin, N. Y.; secy., Dr. W. C. Deming,
Georgetown, Conn. 1922 meeting, Rochester,
N. Y., Sept. 7-8.

Texas Pecan Growers' Association—Presi-
dent, H. G. Lucas, Brownwood; vice-pres.,
John P. Lee, San Angelo; Secretary, Oscar
Gray, Waxahachie.

Western Nut Growers' Association—Presi-
dent, Ferd Groner, Hillsboro, Ore.; secy-
treas., C. E. Schuster, Corvallis, Ore.

Jos. W. Thomas & Sons, King-of-Prussia,
Pa., writing to E. A. Riehl, Godfrey, Ill., say:

"In reply to your favor of the 9th inst. in
regard to the Thomas Black walnut, the tree
which we sent you was undoubtedly a grafted
tree, grown from wood from the original
tree or from other trees grown from the
original. Our father, possibly fifty years
ago, planted a number of nuts from the origi-
nal tree, and when they came to bear there
was not a single one of them like the origi-
nal. This experience led him to further ex-
periments and investigations, which de-
veloped that the only way to perpetuate the
original was by grafting. We consider seed-
ling walnuts in the same class as seedling
apple, peach, or pear would be, a decidedly
uncertain proposition."

Benjamin Buckman, Farmington, Ill., writ-
ing to Mr. Riehl, says:

"The large and extremely productive hazel
of medium quality that I had, after bearing
three or four enormous crops, died. But I
planted many of the nuts, expecting some of
them to be as good as the parent. Out of
100 or so planted, none were as good—not
as half as good. But I let them stand and,
of course, we have plenty of plants of mod-
erate quality. It seems it is the Oregon type
of hazel and grows from 10 to 15 feet or
more in height. It makes good fishing poles
and poles for lima beans; but the seedlings
all vary from each other."

AN AGE-LONG PROBLEM

Dr. William C. Deming, secretary of the
Northern Nut Growers' Association, makes
the following interesting and highly valu-
able reply to an inquiry by a New York City
man and incidentally answers definitely a
question repeatedly asked regarding nut
growing:

"The problem which you have set your-
self, and me, is one that doubtless puzzled
the business men of Babylon and Rome,
and will puzzle those of great cities yet
unfounded. Namely, as you put it, "pur-
chasing, somewhere in this district, rela-
tively cheap land upon which certain trees
could be planted, which could be expected
to be in full bearing not to exceed five to
ten years,—which do not require a large
amount of labor in the cultivation or har-
vesting," and which will afford, "a place to
live and a certain income when perhaps a
younger man will be preferred in my active
place," in business.

"Some of us have thought that we have
seen the solution of this age-long problem
in the growing of nut trees. Some of us
have an abiding faith that the nearest thing
to a solution will be found in nut growing
and that, at the same time, the earth and
mankind will be enriched. For we shall
produce more food with less labor, the end-
less quest of man.

"In speaking of the successful solving of
this problem through nut growing I have
used the future tense, not because I want
to but because I have to. Those of us who
know, through the inward conviction of
faith, need no outer, ocular or statistical
demonstration greater than what we now
have, but the inexperienced and unconvin-
ced rightly ask for demonstration that we
cannot yet give.

"Nor has it yet been demonstrated, even
where nut growing is an established indus-
try, that success can be attained on "rela-
tively cheap land," and without "a large
amount of labor." On the contrary I be-
lieve that the nut growers of Georgia and
California have found that success is to be
attained only on good land and with a very
high degree of laborious and skilled atten-
tion.

"That does not mean, necessarily, that we
are wrong in our expectation of working
out methods that will satisfy your desires
and ours "to have a place to live in and a
certain income," through crop producing
trees, with "more food and less labor."

"But to answer your questions as best I
can. The bulletin you mention is quite
out of date. One must follow the progress
of nut culture through the reports of the
Northern Nut Growers' Association and the
American Nut Journal and it would be im-
possible to advise you, within any reason-
able limits, of the further developments in
nut culture since that bulletin was writ-
ten. But I shall mention some of them in
this letter.

"Within this week I put the following
question to Dr. Morris, our leading optimist
in nut growing: "If you were going to put
ten acres into nut trees for commercial pur-
poses what would you plant?" Without
hesitation he answered, "The shagbark and
the hybrid hickories," and Mr. Bixby, who
stood by, concurred.

"To do this quickly and cheaply one
should take woodland dotted with young
hickory trees and topwork them with im-
proved varieties. In fact this is the only
way it can be done at present because
grafted hickory trees of the best varieties
are not obtainable in quantity at the Nur-

series and probably will not be for a long
time; and, moreover, the successful trans-
planting of hickory trees in the North has
not been worked out.

"The other nut trees, however, can be
more easily obtained and transplanted. The
black walnut in the hands of Mr. Riehl has
shown commercial results. So has the
chestnut to a high degree with him outside
the natural limits of the tree where there
is no blight. Within those limits I believe
that the native chinkapin, the Van Fleet and
Morris hybrid chinkapins and the Chinese
chestnut, *C. mollissima*, are going to be val-
uable. I have all except the Morris chinka-
pins fruiting at my farm under neglected
conditions.

"Other nuts that seem to flourish there
under the same conditions are the Euro-
pean and native hazels; *Juglans regia sinen-
sis*, or Chinese walnut; the Japanese heart
nut and the Ridenhauer almond. Under con-
ditions of high cultivation all these nuts
will do proportionately better.

"But I presume that it is needless for me
to go on. You have probably got the frank
answer that has decided you against nut
growing since you wish something that
can be grown with assured success by fol-
lowing accepted methods and you find too
much that is experimental and problemati-
cal in nut growing.

"Outside of nut growing I have no in-
formation or advice to offer. I have had
some experience in the attempt with other
things than nut trees to wrest a little liv-
ing from the land and I can say that I have
not yet discovered any trail that seems to
lead to the paradise of an easy living from
the land. Nut growing, to my eyes, gives
the most promise."

Experiments at Farmingdale

Editor American Nut Journal:

I had two packages *Araucaria pinus* sent
me. The first I tasted and planted. The
second package I distributed, and also plant-
ed a few. They were only one-half the size
of the first package, and marked, "not of
commercial value." I think they came from
near Concepcion, Chile. Two or three of
the first planted are just coming up through
the soil in the box where I planted them.
A treatise on the *araucaria* (in Spanish)
was also sent me, which I have had trans-
lated and typewritten. Eaten raw, they
have little good taste, as I judge, but they
are compared to the chestnut in the booklet
sent me. They sell in Chile at a high price.
Am not expecting success with the *arau-
caria* here but will try it, even if I am past
80 years old.

I am trying out several numbers of the
Chinese *Zizphus Jujuba*. It is not a nut,
nor a vegetable, and can hardly be called a
fruit as it partially resembles a ripe pippin,
half or three fourths of an inch in diameter
and round to oblong. The pulp is sweetish,
and there is one round to long and sharp-
pointed, hard seed in the center. Seems
hardy at 15 degrees below zero. Grows in a
bush to small tree form, and gives a pro-
fusion of small yellow bloom, but no fruit
so far. My tallest variety is 7 to 8 feet in
height.

The chestnut crop promises well here.
The Van Fleet hybrids are always full of
nuts—rather small for commercial purposes.
No chestnut bark blight nor weevil here so
far.

BENJ. BUCKMAN.

Farmingdale, Ill.

Just mention AMERICAN NUT JOURNAL.

Some Running Comments

Editor American Nut Journal:

In the July number of the Journal I find a number of points to which response may be made by those of us who are interested in nut tree questions.

Mr. Halbert's comments relating to pecans coming true to varietal type when nuts are planted is a matter which relates to Mendelian laws. If an individual pecan tree stands far from other trees of this species and if it happens to be a self-pollinating variety, many of its progeny may doubtless come true or nearly true to varietal type from seed. This is said to be true of the Stuart tree. We must remember, however, that when the gametes for the original nut of the Stuart tree were formed each gamete in the zygote represented many ancestors. These ancestors will appear unexpectedly in the progeny even though the tree be self-pollinating. When a pecan tree is situated near other trees of its species there may be a tendency toward acceptance of pollen from other varieties of the species in preference to its own pollen. Nature seems to enjoy keeping varietal types of a species well mixed in order to establish a mean type, not only in the tree itself, but in its fruit.

* * *

Mr. W. A. Thomas charges the moles with the destruction of sprouting pecans. If he will dig a hole across the burrow of a mole, set a little wire cage with its opening on a level with the burrow of the mole, put in some kernels of nuts or a little wheat or corn, put a large shingle flat over the hole in the ground and a shovel full of dirt on that, I think he will find next morning that he has collected some field mice, pine mice, deer mice or other small rodents which run in the burrows of moles in Nebraska. I tried that sort of thing experimentally and was surprised to find the number of deer mice that run along under ground. I have found their nests high up in trees and grape vines as well as in holes in the trees, but did not know previously that this species (*Hesperomys leucopus*) was as fond of being in unusual places as I myself am.

* * *

Mr. Charles O. Henninger feels that the Northern Nut Growers Association has progressed very little, because it has not as yet delivered more goods. Give us six months more time, Mr. Henninger. The great activity of the members of the Northern Nut Growers Association in experimental work represents only about the age of a particularly fine setter dog. By the time when the age of a worthless dog has been reached, we shall be shaking down nuts by the bushel. The pecan growers, Persian walnut growers and almond growers who are now making such good incomes required nearly twenty years for getting their ideals in proper alignment on their pages of history.

* * *

Mr. F. T. Ramsey has had better success in bud grafting of the pecan when grafting wax was discarded. The hot sun caused some of the elements of the grafting wax to be freed and harmful. We would like to have him try melted paraffin to which a little stearic acid has been added for hardening purposes in a hot climate. Stearic acid may be had at any drug store. It may be melted in any proportion with parowax which is the most desirable form of paraffin for grafting work in my experience.

ROBERT T. MORRIS.

If it relates to nut culture it should be in the AMERICAN NUT JOURNAL. Please send it in.

A New Experimental Nut Orchard Near New York

We are informed that Dr. C. V. Paterno of New York is to take up the feature of nut growing on an important scale on his large farm property at Mount Kisco, Westchester County. Dr. Paterno as a country gentleman is interested in the development of various features of farm enterprises some of which doubtless furnish enjoyment rather than profit. Good citizens of this sort, however, are the ones who can open the way to great new advances of permanent value to the public. They have the satisfaction of being useful as well as having the delight which Horace Greeley found simply in seeing things grow.

We understand that Dr. Paterno is to give particular attention to the hickories. This would seem to be desirable because of the fact that hickories of various species are abundant in the locality. It is a very good rule in horticulture that the varieties which thrive best in cultivation do their best in localities where closely allied species grow naturally.

Mr. Arthur T. Best of Bridgeport, Conn.,

Reply to a Criticism

Editor American Nut Journal:

Your letter of the 14th inst received, relative to the clipping taken from the Rural New Yorker, and replying to same we will quote part of the letter which appeared in publication mentioned for fear you might not have a copy to refer to.

"The enclosed circular of the Gulf Coast Pecan and Fruit Company, Fort Worth, Texas, speaks for itself. I thought perhaps you would care to give your opinion to the readers of the R. N. Y. One hundred dollars invested will net \$10,000 and perhaps \$30,000 and I guess they will throw in the Brooklyn bridge for good measure"—S. Nowlan.

In the first place, we did not say anything like the above, that one hundred dollars will net \$10,000; we did say that an interest should grow to be worth possibly \$10,000 or even as high as \$30,000, and we still maintain that statement and we base our conclusions on the following estimates:

Our lands are located in Jackson County, Mississippi. You know that Jackson County is where the first paper shell pecans were propagated. Our company is engaged in establishing a marketing system for truck garden products and at the same time developing pecan and fruit orchards. We have now 1025 acres and have secured options on several thousand more acres.

Lands have produced from nothing up to as high as \$1000 per acre when fully developed in pecans, and we have many proofs of this fact.

The company is offering for sale 3100 participating interests at \$10 each. These interests constitute a lien on the properties of the company. Half of all profits are set aside to be divided among the holders of these 3100 interests. Therefore, several thousand of acres properly handled together with our marketing system, should pay a sufficient sum when fully developed to pay interest on an investment of \$10,000. And that is the way we presented our argument.

We here in Fort Worth are selling the interests here, because of our bank connections; as we have the Commerce Trust Company here, a reputable banking institution, issue to each subscriber of our interests a debenture bond, promising to pay to each of our investors the full amount of his invest-

ment within a period of 14 years. These bonds are given in addition to our certificates of interests. As the Commerce Trust Company is a reliable institution duly operating under the banking and insurance laws, with assets of considerably over half a million dollars, we consider the investor is absolutely as safe as it is humanly possible to secure him. Of course if this company should fail, the investors would be out his money for a period of 14 years. However, these debenture bonds have a borrowing value which increases yearly as they grow older, until they are worth the entire amount of the subscriber's investment.

In remarking upon the comment of the Rural New Yorker: If this institution is honest, it will succeed regardless of what this publication might say; however, it is sufficiently difficult to promote even an honest effort these days, without having publications romping on one. Our circular, as enclosed, presents references which may be investigated and it will show that the men connected with the enterprise have actually made a success of a similar undertaking.

Mr. Cox, our president, is a member of the National Nut Growers Association, and I have read your Journal several times in his office at Gulfport, Miss. He is successfully now operating an extensive Nursery, propagating pecan and citrus fruit.

I might also state that we were investigated, when we placed an advertisement in some newspapers, by the National Vigilance Committee connected with the Associated Advertising Clubs of America, and the advertising was accepted.

Thanking you for your inquiry.

GULF COAST PECAN AND FRUIT CO.
C. R. Stanton, Vice Pres.

P. S.—Relative to the debenture bond issued to our subscribers by the Commerce Trust Co., of this city: Mr. Nowlan, who sent the letter to the Rural New Yorker, was not offered this kind of a deal, as at the time the company was not financially strong enough to secure the bond.

W. J. Strong, of the staff of the Horticultural Experiment Station, Vineland Station, Ontario, Canada, writes to Secretary Deming that he hopes to attend the September convention of the Northern Nut Growers Association in Rochester, N. Y.

The American Nut Trade: Market and Crop Reports

THE PECAN

U. S. Government Report

Pecan conditions on July 1 for the United States are 53.4 per cent of normal, compared with 56.3 per cent at this date last year and 38.5 per cent on July 1, 1920, as ascertained by the United States Department of Agriculture.

The condition of the pecan crop ranges from 72 to 86 per cent of normal in all states excepting Louisiana where it is 50 per cent, except Georgia 45 per cent, and except Texas 24 per cent. The last two states are the most important in production of wild and cultivated nuts, respectively, and they reduce the average promise to slightly more than half a crop.

The number of trees of bearing age shows an increase of 1.7 per cent over the number a year ago. Of these trees 45.2 per cent are not bearing this year, as contrasted with 37.1 per cent not bearing last year and 16.8 per cent not bearing in a usual year. Sixty-seven per cent of the trees of bearing age are reported as not producing this year in Texas, compared with 47 per cent last year and 20 per cent in a usual year. Trees not producing in Georgia are 35 per cent this year, compared with 19 per cent last year and 11 per cent in a usual year.

In Texas the excessive rains during pollination interfered seriously with fertilization, with a resulting small set of nuts. Considerable damage has been done also by the weevil and case bearer. There has been an unusual premature dropping of fruit. The trade anticipates a crop under 100 cars. Similar, but less serious, conditions in Oklahoma and Arkansas lowered the condition, though not so seriously as in Texas. In both these States some sections have very poor crops. The Red river section of Arkansas shows a condition of only 38, but in the White River and Arkansas bottoms conditions are better than 80 per cent of normal. In Mississippi the wild crop in the wooded sections of the Delta is reported poor; elsewhere it is good and almost normal in the extensive groves of the fine, improved varieties of nuts in the southern part of the state. The acreage of improved nuts continues to increase in the coastal sections. In Georgia the crop is generally short and particularly so in the main commercial sections in the southwestern part of the state. In Florida conditions are very spotted, adjoining groves reporting from 50 to 100 per cent of a crop. The outstanding factor reducing the crop this year appears to be the excessive rains at the period of bloom over a large portion of the pecan territory.

Arkansas Pecan Crop

This year, Arkansas will fare slightly better than other states in the pecan-producing area, according to estimates of the United States Bureau of Crop Estimates, with a production of 75 per cent of a full crop. These are mostly wild pecans however. There are three great pecan-producing sections in the state; the White river bottom, where it is estimated that the crop condition is 87 per cent; the Arkansas river bottom, with a crop condition of 83 per cent, and the Red river section of southwest Arkansas, where a 38 per cent production is estimated. The crop condition for the entire country is 53.44 per cent.

There are not more than 15 or 20 commercial orchards in the state, although the pecan crop is a paying venture. Last year pecans sold for 15 cents a pound wholesale. A local wholesale house that had 200 sacks or approximately 15,000 pounds of pecans held over from last season is expecting to sell them quickly this fall. Another produce house has 3,000 pounds on hand from last year's stock.

80 Per Cent at Columbus, Ga.

Columbus, Ga., July 15—The prospects for a pecan crop in this section are somewhat better during the past 30 days. Recent rains have helped out considerably. We are looking forward to an output of about 80% of last year.

S. G. Simons. SOUTHLAND PECAN CO.

Pecan Experiment Station

Selection of a site for the government pecan experiment station authorized by congress, says the Atlanta, Ga., Journal, has been made by the chief of bureau of plant industry, Department of Agriculture, at Washington. It will be in Lee county, on what is known as the Alley Place, near Philema, Ga., about fifteen miles northeast of Albany. The site was tendered the government by P. J. Brown, of Albany, carrying out the purposes of the former joint owners of the property, S. R. Brown and A. W. Muse, of this city, both now deceased.

The authorization for a pecan experiment station (carrying an appropriation of \$12,000) was secured through an amendment to the appropriations bills by Senator William J. Harris, with the co-operation of Congressman Frank Park, of this district. The site selected includes fences, artesian well, house for man in charge, living quarters for laborers, and building for sheltering tools and implements. The location is accessible both by rail and good highway, and the soil is said to be especially adapted for such experimentation as is planned. The place also has a considerable number of pecan trees of bearing age and suitable for grafting and other propagation experiments and testing of new varieties.

In addition to these experiments, and the combatting of pecan pests, the experts also hope to bring pecan trees to bearing at an earlier age than is now possible. One of the experts is quoted as saying that he expects pecan trees to be developed that will begin bearing in four years.

Experts visited a number of sites that had been offered before making their selection. The site is available to the department of agriculture for as long a period as desired, without rental charge, and with possibility of 30 acres additional if wanted.

SHEARN, Fruitarian, London England, advertises SHEARN'S Nutmeat, Especially prepared to take the place of flesh meats. Can be eaten hot or cold.

We make a Specialty of CORRUGATED CASES

For sending Pecans
by
Parcel Post
and
Express

Write for Samples and Prices.

Atlanta Paper Co.
Atlanta, Ga.

BUDDY NUT TREES

A new hybrid nut tree, cross between the Japanese walnut and the butternut, is the fastest grown nut tree in the world. Bears when five years old large nuts in quantities. We have several thousand of these trees in the nursery and they have all grown from 4 to 6 ft., this year. *SEND FOR CATALOG.*

KESO NURSERIES, Clinton, Conn.

Florida PECAN Orchard

40 ACRES: Seven miles north of De Funiak Springs, Florida, 30 mi. north of Gulf of Mexico, with elevation of 300 feet above sea level.

18 ACRES in paper shell Pecans (250 trees) five years old, (two yrs. in nursery row and three yrs. in orchard.)

Soil is very fertile and will produce abundantly fruits, vegetables and general farming crops. Land is surrounded with good fence and never failing spring of water provides for stock.

Price, for IMMEDIATE ACCEPTANCE \$3,500. Terms granted if desired.

J. H. CARPENTER, JR. Owner,
DE FUNIAK SPRINGS, FLORIDA

FOR SALE—Farm of 69 acres, 12 acres planted to Paper Shell Pecan Trees 6 yrs. old, in perfect state of cultivation. Buildings built 5 years consisting of 5 room Bungalow, Carage, Barns, Hen Houses, One Tenant House. Bungalow equipped with Septic Sewerage, Electricity, Bath and Hot and cold water. Location, Albany, Ga., the center of the great Pecan Industry, best all year round climate in the world. For particulars and terms address: **Dr. C. R. Vanderbilt, 412 Beckley Bldg., Rochester, N. Y.,**

A NEW BOOK! NUT GROWING

By Robert T. Morris

The latest and only up to date book on the newest and one of the most important branches of Horticulture, giving a broad survey of a rapidly growing industry. Detailed explanation of successful methods of propagation and the new process of grafting with the use of paraffin; illustrated.

An invaluable work for all nut growers.

Price, \$2.65, Postpaid

AMERICAN FRUITS PUB'G. COMPANY
39 State Street, Rochester, N. Y.

SPECIAL PECAN REPORT

By E. M. Johnston, Agricultural Statistician.
Representative of Conditions July 1, 1922

From a summary of reports received from all important points of production throughout the state, the following appears to be the present outlook on pecans for Texas this year:

The number of pecan trees of bearing age is 101 per cent as compared to 1921; the proportion of pecan trees that are of bearing age are 77 per cent of the whole number; the proportion of pecan trees of bearing age but not producing this year is shown to be 67 per cent of the total; the proportion of pecan trees of bearing age which do not produce in an ordinary year are 28 per cent of the total and the present condition of the pecan crop as compared to a normal July 1st condition of 100 per cent, giving a promise of a full crop, is shown to be but 34 per cent of that normal

This is an exceedingly low condition and seems to have been brought about by a combination of adverse conditions which are beyond the control of the growers.

Judging from the reports the greatest damage seems to have come from the continual rains during the flowering period and which prevented proper fertilization and from the case bearer whose work seems to have been very destructive to the flowers and buds as well as the leaves.

Eagle Lake, Byers, Richmond, Seguin, Gonzales, Luling, Cuero and Wharton show conditions in this section approaching a complete failure. Austin reports a very poor condition. Castroville appears to have about a third of a crop. Brady reports a 65 per cent condition. Corsicana reports that a good crop was set but that all has since been shed due to case bearer damage. Santo reports a condition of 5 per cent, several other reports from Palo Pinto county report conditions as high as 40 per cent and 75 per cent, so it is not yet certain just how this section stands.

San Saba reports a clean sweep by the case bearer during the last ten days in June. It appears that throughout this section the trees were well loaded until about three weeks ago but have been practically destroyed since that date. Arp and surrounding sections report about 50 per cent condition, Winona 20 per cent condition. It appears that Robertson and Somervell counties had

a 25 per cent condition and yet a total failure is reported from Glen Rose and the highest received from this point was 10 per cent. Albany reports about a 10 per cent crop. Reports from Uvalde section vary from 10 per cent to 33 per cent and suggest a possible 25 per cent crop under which is described as very "spotted" conditions. Wichita, Clay, Archer, Montague, Wise, Jack and Young counties show a condition of 1 per cent with comments that the crop is a "failure absolutely." In this section the trees are reported as having blossomed nicely but the set destroyed by continual rains. Reports from the Comanche section vary from a total failure to a 35 per cent condition with one point reporting as high as 60 per cent but the case bearer is expected to do further damage. Ennis and Stephenville may have prospects of half a crop. Mound reports 40 per cent, Denison 40, Hallettsville 0, D'Harris 40, Castorville 30 and Brady 65.

General reports show the Austin section poor, that the Lometa, Lampasas, Goldthwaite and San Saba sections gave promise of a good crop early in the season but that they cannot now exceed a fourth of a crop, that all along the Brazos there is almost a complete failure as well as at Corsicana and along Chambers Creek, that even the earliest reports from the Red River sections showed extremely short and that since that time further damage has been sustained.

It is generally accepted that Texas products runs from 100 to 600 cars a year, depending on conditions, with an average of some 300 cars or a little better. Judging from prospects as reported at this time it would appear safe to assume that the figure for 1922 will run very close to the lower figure.

A writer in the Dallas Farm News urges the cultivation of nut trees on the cut-over pine lands of East Texas, where, he says, pecans grow in all the overflow lands, hickorynuts abound and even the old-fashioned black walnut grows very generally, not to mention chinquapins and several varieties of figs which have escaped from cultivation.

Frank Wallace, state entomologist of Indiana who recently returned from a trip through many states including California, said he found conditions all over the country apparently ideal for the bumper crops in all fruits.

In South Alabama

Spring Hill, Ala., July 21—The pecan crop in South Alabama will be very good this year in all orchards which have been properly taken care of. In the orchards which have been poorly fed, especially where the soil is light and sandy, there will be a very small crop.

J. LLOYD ABBOT,
Secretary, Nat'l Nut Growers Assn.

Indiana Nut Crops

Rockport, Ind., July 28—Have just made a trip around to the nut trees in this section and the prospect is for a good pecan crop, and a fair crop of hickory nuts and black walnuts on the native seedling trees.

My young budded trees have good crops of nuts; also trees that I have top-worked for other parties are reported bearing this season.

J. F. WILKINSON.

In Lower Mississippi

Ocean Springs, Miss., July 15—Pecan crop condition has changed but little since my last report, but it is becoming more evident that seedlings will be very scarce in this section; probably not 10% of last year's crop.

Cultivated orchards of the leading varieties will no doubt run from 20% to 35% of last year's crop. The nuts are growing very rapidly and as there is plenty of moisture they promise to be large and well filled. Scab is showing up a little in unsprayed orchards. The summer drop has not been bad so far. The nut case bearer and cigar case bearer have both diminished since last season, even where not sprayed.

THEO BECHTEL.

Mr. Burkett's Report

Clyde, Tex., July 17—Have just returned from a four weeks trip over the state making observations and assisting those interested in pecan growing. Our Texas forest crop is going to be very short. My estimate based on personal inspection of a large territory near the center of the state, and reports reaching me from correspondents indicate a crop probably less than 100 carloads.

J. H. BURKETT,
Nut Specialist, State Dept. of Agr.

Just mention AMERICAN NUT JOURNAL

THE PECAN SALES CO.

ESTABLISHED 1909

ALBANY - - - - - GEORGIA

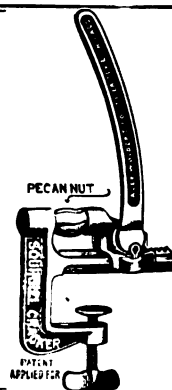
ARE CASH BUYERS OF PAPER SPELL PECAN NUTS. NOW READY TO PURCHASE REQUIREMENTS OF 1922 CROP. ADVISE VARIETIES AND APPROXIMATE QUANTITY YOU WILL HAVE TO SELL.

Squirrel Nut Cracker

BEST ON EARTH

Cracks the Shell but not the Kernel.
Adapted only for table nuts—especially Pecans.

ALEX WOLDERT CO.
SOLE DISTRIBUTORS
TYLER, TEXAS and CHICAGO, ILL.



The Logical Market Place for Sale of Nuts

The Advertising Columns of the American Nut Journal Chief Exponent of the Trade.

Hundreds of Readers of this Journal Ask for Pecan Nuts in Moderate Quantity at Prices Less Than the Retail Price per Pound in Northern Markets. They Would Be Eager Buyers if They Knew Where to Apply. If There is Any Surplus at Any Time, the Advertising Columns of this

Journal Will Dispose of It. Rate, \$2.80 per Inch. Announcement Should be Maintained the Year Around (Yearly Rate, less than 60 Cents per Inch a Week) to Secure Best Results. Make Your Name a Household Word Wherever Pecans Are Wanted. Make It Easy To Procure Them.

AMERICAN NUT JOURNAL

P. O. Box 124

ROCHESTER, N. Y.

THE PECAN

Peaches and Pecans

From time to time men with vision and enterprise come to Georgia and develop our resources on a scale which shames our own people for having overlooked the opportunities that lay at their door. The Georgia Pecan and Peach Company, which is now developing 10,000 acres of fertile land in the Albany district is an Illinois concern. Mr. Robert C. Berckmans, whose name is a household word in the state and indeed throughout the South, is supervising horticulturist, but the only Southern member of the development company, aside from Mr. Berckmans, is Mr. C. S. Barrett, vice president and general manager, who, after spending many years elsewhere, now turns to the South as the most promising field for development.

The purpose of the Georgia Pecan and Peach Company is, as its name partly implies, to develop two of the orchard crops for which Georgia is and always will be most famous. The novel idea, and one of the most attractive features of the project, is that the long waiting for pecan trees to come into bearing on a commercial scale will be discounted by the interplanting of peach trees.

The shipping qualities of the pecan are, of course, perfect. They can be sent around the world. They can be held and marketed practically at will.

Within recent years Dr. Morris, of Connecticut, has developed a method of budding and grafting which has revolutionized that art, and since it has always been comparatively difficult to work nut trees in this way, the success he has achieved with such trees has marked an epoch. The possibilities of increasing the volume and improving the quality of the pecan are inexhaustible.

If the pecan is indigenous to the South, it is equally true that the state of Georgia is particularly congenial among all the states of the South to this kind of nut. A few far-sighted men are now reaping the reward of their vision, but in a broad general way we may say that the work of development has

hardly begun. It is just such enterprises as that of the Georgia Pecan and Peach Company which promise to awaken us to our own possibilities and make us rich beyond the dreams of avarice.—Macon, Ga., News.

Louisiana is the pecan belt, but the agricultural statistician, New Orleans, does not recognize the pecan industry in his monthly crop reports.

MEMBERSHIP DRIVE

National Nut Growers Association

\$2.00 Per Year—Limited Offer

By direction of the Executive Committee of the Association the Membership Fee has been reduced to \$2.00 for the limited period of the present Membership Drive.

REGULAR YEARLY RATES

Association Membership.....\$4.00
American Nut Journal.....2.00

SPECIAL YEARLY RATES

Association Membership } \$3.25
American Nut Journal }

Address J. Lloyd Abbot, Sec'y.
Route 1, Spring Hill, Ala.

200,000 Trees for Grafting

Arp, Texas, July 21—We have not got over a 25% crop on any variety except the Schley, which shows at this time a 50% crop. We feel that the shortage in a crop is due to the extremely wet spells we had during the blooming season, which lasted several days; also to the work of the case bearer.

We are glad to report that pecan growing in this section is increasing very rapidly. In order to take care of the rapid growth, we will have 200,000 trees ready for grafting and budding next spring. We have planted 550,000 fine nuts which will be ready the following spring.

It is our intention to try out two experiments in controlling the case bearer which

we will be glad to report on later in case they should prove out successful.

TEXAS PECAN NURSERY.
R. W. Fair.

THE FILBERT

Crop in Southern Italy

From Consul Homer M. Byington, Naples, Italy. June 6, 1922

Various growers and traders interviewed predict that the crop of filberts in Southern Italy for the season 1922 will be of high quality but of small quantity. It is estimated that the production will show a decrease of 50 per cent over the 1921 crop which was an excellent one, being 30 per cent higher than the 1920 crop. The harvesting of the crop will commence about the beginning of July. At present, prices for the 1921 crop are ranging around 310 lire per 100 kilos and the market is steadily rising because of the small 1922 crop which is prophesied. Prices at this time in 1921 were quoted around 360 lire per 100 kilos. The present exchange rate is about the same as in 1921, at this time of the year. Stocks on hand of the 1921 crop are estimated to be about at least one-fourth of the whole harvest.

AMERICAN MARKET FOR FILBERTS

America was the principal market for filberts in 1921 and 7,491,400 lbs., valued at \$563,790, were exported to the United States. For the first three months of 1922 exports to the United States totaled 988,096 lbs., valued at \$90,002.

The 1919 crop was estimated at 10,000,000 kilos, the 1920 at 12,500,000 kilos and the 1921 at 16,000,000 kilos. This year the figures will be below those of 1919, but consideration must be taken of the fact that 4,000,000 kilos of the 1921 crop are reported to be still on hand.

(Upon the date of this report \$1.00 equals 19 lire.)

If it relates to Nut Culture it ought to be in "American Nut Journal." Please send it in.

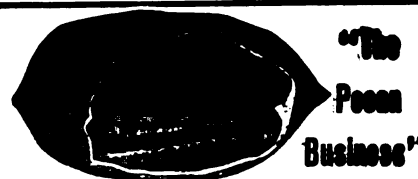
Budded and Grafted
HARDY NORTHERN NUT TREES
Best varieties, grown in natural nut soil. Send for catalog. Have your seedling nut trees topworked to these fine varieties.
Information and estimate on request.
INDIANA NUT NURSERY
Rockport. J. F. Wilkinson, Prop. Indiana

PECAN TREES

100,000 TREES—STANDARD VARIETIES
WE GROW NOTHING BUT PECAN TREES
HIGH QUALITY—SERVICE THE BEST
SIMPSON NURSERY CO., MONTICELLO, FLA

THIS SPACE
\$2.50 Per Month Under yearly Contract
Under less than yearly term:
\$2.80 Per Month

Texas Pecan Nursery
Arp, Texas
THE PEOPLE THAT GROW
WELL-ROOTED PECAN TREES



NEW EDITION FREE

A practical guide showing how to bud pecans. Tells how to grow trees 12 inches in diameter by the end of the 8th year, which yielded 400 lbs. nuts per acre.

Trees, Nuts, Groves for sale direct without agent at attractive reduced prices
B. W. STONE, Thomasville, Ga.

THIS SPACE
\$60 Per Week Under Yearly Contract
Including Publication in both **AMERICAN NURSERYMAN** and **AMERICAN NUT JOURNAL**
One Month: \$2.80 in both.

SUCCESS

and other leading varieties. Also citrus
BECHTEL PECAN NURSERIES
Ocean Springs, Miss.

PECAN TREES

Plant them this year! Buy direct from nursery and save agent's profit. All standard varieties; quality and service the best. Write us for prices.

FLORIDA NURSERIES
W. W. Bassett, Prop., Monticello Fla.

AMERICAN NUT JOURNAL

CHIEF EXPONENT OF
AMERICAN NUT INDUSTRY

Of National Circulation

Covering Every Phase of Nut Culture

Subscription: - - \$2.00 Per Year
Advertising: - - \$2.80 Per Inch

Official Journal { National Nut Growers Association
Northern Nut Growers Association

AMERICAN FRUITS PUBLISHING COMPANY

39 State Street, Rochester, N. Y.

PERSIAN WALNUT

Advantages of Thinning

Thin the groves and increase the production. This is the gospel that is being preached to walnut growers by C. C. Teague, president of the California Walnut Growers' Association, and by several farm advisers in Southern California.

Being a practical business man farmer, Mr. Teague practices what he preaches, and he didn't advise thinning until after he had tried it on his own ranch and proved the soundness of the theory. Now he is anxious to see others reap the benefit of his experience.

In the fall of 1917 and the spring of 1918 Mr. Teague had removed half the trees on his Oliveland property, and he now insists that he is money in pocket as a result of the courageous step.

As originally planted the trees stood 40 feet apart on an equilateral triangle, with 31.5 trees to the acre. The ranch hands kept grubbing away until they had taken out 2018 trees. There are now 15.75 trees to the acre. They stand 40 feet apart in the rows, with 60 feet of space between the rows.

The Irvine Walnut Branch

W. T. Webber, sales manager of the California Walnut Growers' Association says: James Irvine is the owner of the Irvine ranch, one of the largest individual properties in California, and is part owner of the San Joaquin Fruit Company, a large orchard property. Both the Irvine ranch and the San Joaquin Fruit Company are and have been for several years members of the Irvine Walnut Growers' Association, which in turn is a member of the California Walnut Growers' Association, which, therefore, markets all walnuts produced by Mr. Irvine on both properties. Prior to the organization of the Irvine Walnut Association both the Irvine ranch and the San Joaquin Fruit Company were members of the Santa Ana Walnut Growers' Association, which markets its walnuts through the California Walnut Growers' Association. The walnut acreage of the Irvine Company is approximately 1,300 acres and that of the San Joaquin Fruit Company 600 acres."

Bordeaux walnut halves are held abroad at 1,000 francs, pieces at 650 francs and small halves at 1,050 francs for the first half of September shipment, guaranteed to be freshly cracked.

Just mention AMERICAN NUT JOURNAL.

Curculios Attack Young Walnuts and Hickory

Several species of snout-beetles nearly related to the common plum curculio attack the immature fruits, tender shoots, and leaf petioles of walnut and hickory trees. A discussion of four such species, all belonging to the genus *Conotrachelus*, which closely resemble one another in appearance, habits, and seasonal activities, is given in United States Department of Agriculture Bulletin 1006, "Curculios That Attack the Young Fruits and Shoots of Walnuts and Hickory," by Fred E. Brooks, entomologist.

Special characteristics of the butternut curculio, the black walnut curculio, the hickory nut, and hickory shoot curculios are separately described. Methods of controlling nut-infesting curculios include burning the fallen nuts, spraying the leaves which they eat with arsenical poisons. While the dropping of curculio-infested walnuts and hickory nuts before the larvae in them mature affords an opportunity for destroying the young insects by collecting and burning or otherwise disposing of the fallen nuts, this method is successful only in cases of isolated trees or plantations. Lead arsenate applications on the stems, leaves and fruit, soon after growth starts in the spring, can be counted on to give good results in reducing injury from butternut and black walnut curculios. Spraying walnut trees with lead arsenate at a strength of 6 pounds to 50 gallons of water is an effective method of controlling the butternut curculio.

Walnut Exposition

Citizens of Santa Ana are making plans for the California Walnut Exposition to be held in Santa Ana December 2 and 9. Members of the committee canvassed the business district and secured the signatures of sixty-nine business men who agreed to back the affair. Although no loss is expected, each man who signed the petition has agreed to pay \$100 for losses in case a deficiency results from the show.

Prof. Kyle's Report

College Station, Tex., July 26—Due to cold, wet weather, the pecan set was only 60 to 70% of a crop. The case bearer then cut it from 5 to 10%. Some sections report almost a failure.

E. J. KYLE.

Mississippi pecan trees have been damaged by an unusual attack by the fall webworm. Owners are destroying the pest by burning with torches on long poles.

THE ALMOND

Almond Shipping Center

Re-organization plans of the California Almond Growers' Exchange provide that Oakdale will be the shipping center of the lower San Joaquin Valley crop. Storing and shipping facilities are being enlarged.

Tariff Schedules

The Senate tariff proposal on pecans is: Unshelled, 3c; shelled, 6c. The House rate is: Unshelled, 1c; shelled, 8c.

Almonds—Unshelled, 5 cents per pound; shelled, 15 cents (rates in the House bill were 4 and 12 cents respectively.)

Walnuts—Unshelled, 4 cents; shelled, 12 cents (House rates 2½ and 7½ cents).

The principal fight was centered on the rates on almonds and walnuts. Senator Johnson of California led the fight against Senator Lenroot of Wisconsin and answered the attacks made on the schedules proposed by Senator Walsh of Massachusetts who made the fight on the Democratic side.

A feature of the contest was a heated fight between Johnson and Lenroot. Lenroot admitted that he was making the fight against California at the behest of candy manufacturers, some of whom were of his own state. He contended that the proposed rates urged by the California senator to protect the growers here would increase the cost of candy if the importation of walnuts and almonds were cut off. Johnson battled for home industries and won.

Johnson assailed the candy makers and proved by their own statements that the candy manufacturers made profits during 1921 of as high as 300 per cent, Lenroot was forced to admit that he voted to give the candy makers a 40 per cent tariff rate but said he felt this was justifiable and reasonable. When the vote was taken Johnson won by a vote of 39 to 18 on the rate for almonds and by a vote of 38 to 21 on the unshelled walnut rate.

Milledgeville, Ga., July 23—The pecan nut crop, throughout this section will not be over 50% of a normal crop. This will apply to the seedlings as well as the improved varieties.

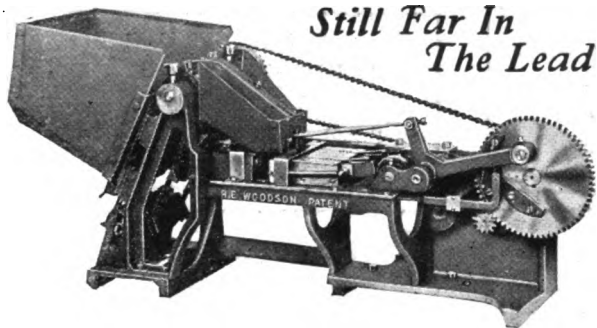
EDWARDS & PATTERSON.

Mayor F. C. Krysher, Carbondale, Ill., this season sold his 60-acre crop of peaches for \$17,500—10,000 bushels at \$1.75.

If it relates to nut culture it should be in the AMERICAN NUT JOURNAL. Please send it in.

The Woodson Pecan Cracking and Grading Machines

Still Far In
The Lead

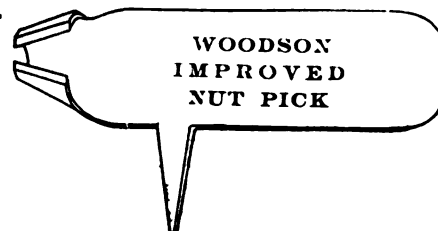


Beware of Machines that infringe on my patents, as most of those being offered are infringements and will be vigorously prosecuted.

Look for the announcement of the WOODSON Power Black Walnut cracking machine.

Placing your order for later shipment will prevent you from being disappointed in delivery this Fall.

Robert E. Woodson, Inventor and Manufacturer
Office and Factory—3763 FOREST PARK BOULEVARD, ST. LOUIS MISSOURI



American Fruits Company's Library Opportunities

PRACTICAL BOOKS ON HORTICULTURE, NUT GROWING, NURSERY PRACTICE

Any of the following books will be sent on receipt of price by AMERICAN FRUITS PUB'G CO.,
126-125 Ellwanger & Barry Bldg., ROCHESTER, N. Y. Prices subject to change.

American Apple Orchard By F. A. Waugh.....	\$1.90	Insect Book—Dr. L. O. Howard....	6.30	Parsons on the Rose—Parsons.....	1.75
American Fruit Culturist By John J. Thomas.....	2.65	Insects and Insecticides—Weed....	2.15	Peach Culture—J. A. Fulton.....	1.65
American Fruit Farm—F. N. Thorpe	2.65	Insect Pests of Farm, Orchard and Garden—Sanderson and Pears..	4.65	Peach Growing—By H. P. Gould...	2.65
American Grape Culture—Munson..	2.65	Irrigation Farming—L. M. Wilcox.	2.40	Pear Culture for Profit—Quinn....	1.35
American Grape Growing and Wine Making—George Husmann	2.15	Irrigation for the Orchard—Stewart	1.75	Picturesque Gardens—Henderson..	2.25
American Horticultural Manual By Budd-Hansen, two vols.....	2.15	Land Drainage—Joseph H. Jeffrey	2.15	Plant Breeding—By Dr. L. H. Bailey	3.40
American Peach Orchard—Waugh.	1.90	Landscape Gardening—Art of Land- scape Architecture—Parsons....	3.65	Plant Propagation: Greenhouse and Nursery Practice—M. G. Kains	2.40
Bulbs and Tuberos Rooted Plants.	2.15	Landscape Gardening—Downing's Famous Work—10th Edition	6.00	Plant Physiology—B. M. Duggar...	3.00
Bush Fruits—By F. W. Card.....	3.15	—Revised by Waugh.....	6.00	Practical Forestry—A. S. Fuller...	2.15
California Fruits and How to Grow Them—E. J. Wickson, A. M....	4.15	Landscape Gardening—House and Garden's Book of Gardens, 9 1/2 x 12 1/2, 400 illustrations.....	5.15	Practical Fruit Grower—Maynard..	1.00
Citrus Fruits—J. E. Coit.....	3.40	Landscape Gardening, Kemp— Revised by F. A. Waugh.....	2.15	Principles of Agriculture—Bailey...	2.00
Commercial Apple Industry of North America	3.65	Landscape Gardening—Maynard....	2.65	Productive Orchard—F. C. Sears	2.65
Cyclopedia of Agriculture By E. V. Wilcox—C. B. Smith...	3.75	Landscape Gardening—The Small Place—By Elsa Rehmann.....	3.65	Principles of Fruit Growing—Bailey	2.65
Dwarf Fruit Trees—Waugh.....	1.00	Landscape Gardening—Plants for....	3.85	Principles of Pruning—Kains	2.65
Farm Bureau Movement—O. M. Kile	2.15	Landscape Gardening—Cridland....	2.65	Pruning Manual—By L. H. Bailey.	2.65
Fertilizers and Crops By Dr. L. L. Van Slyke.....	3.40	Landscape Gardening—The Com- plete Garden—Albert D. Taylor.	6.15	Putnam's Garden Hand Book.....	2.00
Fertilizers—Edward B. Voorhees...	2.65	Landscape Gardening—O. C. Si- monds	6.15	Quince Culture—W. W. Meech....	1.35
Field Notes on Apple Culture By Dr. L. H. Bailey.....	.90	Manual American Grape Growing —Hedrick	3.40	Roses—How To Grow—Robert Pyle	1.35
First Principles of Soil Fertility By Alfred Vivian.....	1.50	Making Horticulture Pay—Kains...	1.90	Rose—H. B. Ellwanger.....	1.40
Forcing Book—By Dr. L. H. Bailey...	2.15	Manual of Fruit Diseases L. R. Hessler, H. H. Whetzel..	3.15	Sales Promotion By Mail.....	2.15
Fruit Growing in Arid Regions....	2.75	Manual of Fruit Insects M. V. Slingerland, C. R. Crosby	3.90	Small Fruit Culturist—A. S. Fuller.	1.75
Fruit Garden—P. Barry.....	2.15	Manual of Gardening—L. H. Bailey	3.40	Soils—E. W. Hilgard.....	4.25
Fruit Harvesting, Marketing—Waugh	1.90	Manual of Tree Diseases—Rankin.	3.40	Soils—Lyon-Pippin-Buckman	3.40
Fruit Insects—Crosby.....	3.90	Manual of Vegetable Garden Insects By Crosby & Leonard.....	2.90	Soils—F. H. King.....	2.40
Fumigation Methods	1.90	Manures and Fertilizers—Wheeler.	2.65	Soils—By Charles W. Burkett.....	1.90
Gardening for Pleasure—Henderson	2.15	Modern Fruit Marketing—Brown...	1.90	Spraying Crops—C. M. Weed.....	1.00
Gardening for Profit—Henderson...	2.15	Modern Propagation Tree Fruits— B. S. Brown.....	1.65	Standard Cyclopedia of Horticulture Edited by L. H. Bailey. In six volumes. 3,600 pages. 4,000 text engravings. 96 sepia half- tones. 500 collaborators. May be had on installment payments	40 00
Grape Growers Guide—Chorlton...	1.65	Nature's Garden—Neltje Blanchan	6.30	Strawberry in North America—S. W. Fletcher	1.90
Grape Culturist—A. S. Fuller.....	2.15	Nursery Manual—Dr. L. H. Bailey.	2.65	Strawberry Growing—S. W. Fletcher	2.40
Greenhouse Construction—Taft ...	2.40	Natural Style Landscaping—Waugh	2.65	Success in the Suburbs—John R. McMahon	2.15
Greenhouse Management—Taft.....	2.40	Manual Tropical and Sub-tropical Fruits—Popenoe	3.90	Successful Fruit Culture By Samuel T. Maynard.....	1.75
Hedges, Windbreaks, Shelters....	1.00	Nut Culturist—Andrew S. Fuller...	2.15	Surgeon's Philosophy—Dr. R. T. Morris	3.15
How To Grow Roses—Robert Pyle.	1.35	Nut Growing: Latest Information; Guide to Propagating—By Robert T. Morris	2.65	Systematic Pomology—Waugh....	1.90
Injurious Insects—F. L. Washburn	2.65	Ornamental Gardening—E. A. Long	2.15	Ten Acres Enough—I. P. Roberts..	1.75
Insects of Economic Importance— Herrick	2.15	Principles of Floriculture.....	3.40		

A paper which gives the best value for the money to the reader will give the best value to the advertiser as well. I don't think there is any argument about the soundness of this view.—H. Dument, Chicago, Ill., in Printer's Ink.

WANTED Names and Addresses of Owners of Groves of Native Nut Trees in Northern States.

In the interest of Northern Nut Culture this Journal desires the above information to serve as a basis for extension of Nut Culture.

Readers will confer a favor by sending us lists of names and addresses of those who have stands of nut trees on their property, (with some account of productivity if practicable). Black walnut, English walnut, butternut, hickory, chestnut, filbert, etc.

American Nut Journal P.O. Box 1 2 4 Rochester, N. Y.

BUDDED and GRAFTED Nut Trees

Start right with my hardy Pennsylvania grown trees and be assured of success. Attractive Catalogue Free.

I have this season a fine lot of stake trained Pecan, English Walnut, Black Walnut and Persimmon trees budded on root pruned transplanted stocks, that will please you and that will transplant easily and safely. Write for catalogue.

J. F. JONES, The Nut Specialist
LANCASTER, PA.

THIS SPACE
\$2.50 Per Month Under Yearly Contract
Under less than yearly term:
\$2.80 Per Month

GRAFTED PECAN TREES
ALSO BUDDED ROSES and SATSUMAS
We Solicit Your Inquiries
Carol Plantation Nurseries,
THEODORE, ALA.

WANTED
BACK NUMBERS OF THE
AMERICAN NUT JOURNAL
Will pay 50c each for a copy of numbers 2, 3 and 4 of Volume 1.
Address X, care this journal.

CONSULTING TROPICAL HORTICULTURIST and TREE EXPERT

HARVEY C. STILES

COLUMBIA, TEXAS

Specializing in Pecans, Grapefruit, Avocados, and Landscape Development. Long experienced expert for—and present active director of—many such large projects throughout tropics and semi-tropics. Examinations, Reports, Plans, Specifications and Estimates. Correspondence suggested.

Have You Nuts to Sell?

HICKORY NUTS BLACK WALNUTS
BUTTERNUTS CHESTNUTS

Hundreds of buyers are asking where the nuts can be obtained in quantity. Place your Sale Advertisement in the AMERICAN NUT JOURNAL for quick returns. \$2.80 per inch.

39 State St., Rochester, N. Y.

American Nut Journal

DEVOTED TO NUT GROWING INTERESTS
GENERALLY THROUGHOUT THE AMERICAS

□ Vol XVII, No. 3

SEPTEMBER, 1922

Per Copy 20c.



A TYPICAL EUROPEAN FILBERT, ROCHESTER, N. Y.

As grown in the Nurseries of McGlennon-Vollertsen - Bush six years
old, bearing - One of the many varieties grown there.

39 STATE ST.



ROCHESTER, N. Y.

American Fruits Publishing Co.

THE SOUTH'S LARGEST AND MOST DEPENDABLE PECAN NURSERY

Over Half Million Pecan Trees Growing.
64 Acres in Nursery Alone.



Buy the best rooted, budded Paper Shell Pecan trees FROM THE LARGEST EXCLUSIVE PECAN NURSERY WEST OF THE MISSISSIPPI RIVER AND ONE OF THE LARGEST IN THE SOUTH. 90 to 100 per cent of our Pecan trees live. Will the trees you have been buying do this?

A good lateral root system like we grow, and like is shown on the left side of picture is the life and making of a pecan tree, and they must have these roots if you grow them successfully.

You can buy our well rooted pecan trees just as cheap, and in many cases cheaper direct from us than you can get the trees like are shown on the right of this picture from other nurseries or their agents.

We dig them well, pack well, and get them to you in first class condition.



The Root System We Grow

The Kind of Roots Most Others Grow

Haven't you been buying trees with roots like the ones shown on right side of picture that didn't have scarcely any side roots? Did they give good satisfaction? 90 to 100 per cent of our trees live and grow on account of the wonderful lateral or side root system they have which enables them to reach out in all directions from 24 to 36 inches and gather all the necessary plant food and moisture. Our trees will be worth three times more to you than the poorly rooted trees that are grown by 90 per cent of the pecan nurseries.

TEXAS PECAN NURSERY

ARP, SMITH CO., TEXAS R. W. FAIR, Manager.

We Sell by Mail Only and Save You the Middle Man's Profit.
If you are interested in pecan growing write for our 32-page FREE booklet on "How to Grow Paper Shell Pecans."
Send in your order at once so you can get the sizes and varieties you want.

PEACH TREES—Write to Fair's Peach Nursery, if you want peach trees in any size lots. The trees are fine and the prices right. Large orders especially solicited.

List Your Wants And Offerings In THE OFFICIAL JOURNAL

Every Month To Every State In The Union

AMERICAN NUT JOURNAL

ROCHESTER, NEW YORK

Dispose of your PECANS to the best advantage.
Get in touch with responsible dealers before selling.

We buy seedlings
and fancy stock.



Small shipments
or carloads.

Write or wire for our cash prices.

R. E. FUNSTEN COMPANY, ST. LOUIS, MO.

Buckman's Brevities

Editor American Nut Journal:

In your August issue, you make me say—page 18—that the *Ziziphus Jupuba* "resembles a pippin," in outside appearance. Now a pippin is an apple. I intended to say a small Mango pepper, ripe, as the color is reddish brown and the texture of the outside covering thin and yielding like the pepper. Some are as small as an average filbert, and some are larger. It may, or may not, have a little commercial value, as it is used in China as a "preserve."

The Stabler walnut is holding its fruit on a small tree here, and I may have a chance to compare it with our best home kinds. Our severe drouth here is causing most of the fruits to be undersized, but the chestnut crop will be large from the few bearing trees that we have.

Page 19—While the various kinds of mice are responsible for the eating of nuts and corn planted, yet I feel sure that a part of this injury may be done by the sleek-furred and sharp-nosed mole, and especially after the seed has softened and germinated. This has been strongly denied for forty years by professors of natural history. But lately they have admitted that moles "do sometimes eat seeds." I have seen many thousands of cherry, plum and other seeds that had been opened up by mice. Yet in some cases I have felt certain that the mole was the depredator. I poison them with bits of strychnined beefsteak, placed in their runs and covered with a clod of dirt.

Pocket gophers may be eradicated by plugging small potatoes, inserting a little strychnine, digging to where the hole is open, and rolling into it a potato, afterward filling up the excavation. This to be done in autumn, and by the following spring the gophers have disappeared. This is not the gopher of the North and Pacific slope.

On page 19, "Reply to Criticism:" I have this to say, that the Rural New Yorker may be mistaken, but it is an honest paper, and as competent to give advice on questionable stock schemes as any other publication in the United States. Untold millions of dollars have been lost by biting at attractive schemes in stocks of oil, gas, minerals, tree planting, stock raising, etc. The person who has worked for his or her dollar, would best invest in something that is positively known to be reliable. "For ways that are dark and tricks that are vain, the heathen 'stock-seller' is peculiar."

BENJ. BUCKMAN.

Farmingdale, Ill.

A NEW BOOK! NUT GROWING

By Robert T. Morris

The latest and only up to date book on the newest and one of the most important branches of Horticulture, giving a broad survey of a rapidly growing industry. Detailed explanation of successful methods of propagation and the new process of grafting with the use of paraffin; illustrated.

An invaluable work for all nut growers.

Price. \$2.65, Postpaid

AMERICAN FRUITS PUB'G. COMPANY
39 State Street, Rochester, N. Y.

AMERICAN NUT JOURNAL --- SEPTEMBER, 1922

EDITORIAL DEPARTMENT—Communications on any subject connected with Nut Growing and Distribution are cordially invited by the editor; also articles on this subject. We shall be pleased to reproduce photographs of trees of interest, methods and scenes connected with the Nut Industry; portraits of individuals, etc. Suggestions are cordially welcomed.

ADVERTISING—Advertising forms close on the 10th of each month. If proofs are wanted, copy should be in hand on the 1st.

Advertising rate: 20 cents per agate line; \$2.50 per column inch for any amount of space.

Advertisements that do not represent reliable concerns will not be accepted.

SUBSCRIPTIONS—The "American Nut Journal" will be sent to any address in the United States for \$2.00 a year; to Canada or abroad for \$2.50 a year. Three years: In United States, \$5.00; Canada, \$6.50.

Add ten cents for exchange unless bank draft, express or postal money order is used.

WHAT THIS JOURNAL STANDS FOR—Reliable information on all phases of the Nut Industry. It is for the advancement of Nut Growing in general; it is in no way confined to the interest of a particular kind of nuts, nor of a particular section. It is broad in scope and absolutely independent. The aim of "The American Nut Journal" is to stimulate thousands of persons into developing interest in one of the greatest food supplies of the future—to line the roadsides and fill the waste places with trees of a sort which yield dollars worth of fruit every year instead of the mere bunches of leaves resulting from present shade and ornamental planting. At the same time it will record the progress of the industry, the latest descriptions in the note book of the biologist and plant physiologist, the rapidly expanding knowledge of methods, the increasing acreage, and in short the news as it develops of an industry whose importance is recognized by an increasing number of persons in all sections.

Entered as second-class mail matter June 6, 1914, at the post office at Rochester, N. Y., under the Act of March 3, 1879.

AMERICAN FRUITS PUBLISHING COMPANY, Inc.

Ralph T. Olcott, Editor and Manager

121-123-125 Ellwanger & Barry Bldg., Rochester, N. Y.

Classified Business Announcements In This Issue.

Alexander Woldert Co.....	"Squirrel" Nut Cracker.....	37	Logical Market Place.....	For Selling Nuts.....	37
Barry Nut Company.....	Special Announcement	37	Northern Nuts	Sources aWnted	40
Bassett, W. W.	Pecan Trees	38	"Nut Growing"	New Book	26
Bechtel's Pecan Nurseries...	Grafted Pecan Trees.....	38	Nut Information	Special Topics	27
Carol Plantation Nurseries...	Grafted Pecan Trees.....	40	Nuts as Staple Food.....	Dr. J. H. Kellogg.....	27
Florida Nurseries	Pecan Trees	38	"Nut Trees for the North".	Expert Advice	27
Funsten Company, R. E....	Pecans, All Kinds, Wanted.....	26	Simpson Nursery Co.....	High Grade Pecan Trees.....	38
Griffing & Company, C. M....	Pecan Trees	38	Southern Nut Tree Nurseries	Pecan Trees	37
Indiana Nut Nursery.....	Northern Pecan Trees.....	38	Stiles, Harvey C.....	Tree Expert	40
Inter-State Nurseries	Pioneer Pecan Growers.....	38	Stone, B. W.	Pecan Trees, Nuts, Groves.....	38
Jones, J. F.	Grafted Pecan Trees.....	40	Texas Pecan Nursery	Budded Pecan Trees.....	26
Keso Nurseries	"Buddy Nut Trees"—Hybrid.....	37	Wanted	Names of Grove Owners.....	40
Lancaster Nut Nurseries....	Northern Nut Trees.....	40	Wilkinson, J. F.	Grafted Pecan Trees.....	38
			Woodson, Robert E.....	Pecan Cracking and Grading Ma-	39
				chines	

IMPORTS OF NUTS INTO THE UNITED STATES, FOR CONSUMPTION, DURING THE LAST THIRTEEN YEARS

(Compiled by Bureau of Commerce and Navigation, Department of Commerce, Especially for the "American Nut Journal.")

KIND	1909	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919	1920	1921
Almonds—not shelled.....lbs.	2,120,632	6,810,056	3,762,654	5,242,563	2,363,860	5,561,059	4,684,594	2,368,369	4,901,168	6,149,374	7,482,538	6,460,732	5,068,215
Shelled	8,536,054	10,495,750	12,160,615	11,692,368	12,656,067	13,896,621	12,168,133	13,210,668	19,160,258	21,444,767	28,007,906	18,769,626	21,572,634
Apricots and peach kernels lbs.	27,854	13,551	13,551	7,339	18,769	18,572	67,164	11,926	250,075			65,175	32,606
Coconuts in the shell.....Dollars	\$1,246,463	\$1,286,970	\$1,704,262	\$2,012,203	\$1,793,713	\$2,150,500	\$1,593,666	\$1,891,328	\$2,583,560	\$2,490,368	\$4,063,282	\$4,230,221	\$2,283,600
Coconut Meat broken or Copra not shredded, desiccated or prepared.....lbs.	23,742,518	20,830,539	38,081,984	61,505,787	34,283,592	44,459,158	88,680,382	108,507,765	247,043,127	430,649,332	258,637,781	215,188,461	189,320,950
Desiccated, shredded, cut or similarly prepared.....lbs.	5,461,602	5,985,308	6,961,850	5,396,465	6,826,095	9,307,924	5,866,806	7,947,380	10,491,796	20,269,909	29,637,674	30,631,029	35,633,497
Cream and Brazil.....bu.	409,644	461,496	277,679	21,601,008	11,933,139	11,431,531	21,483,319	12,489,217	16,230,023	11,282,068	13,076,338	13,035,436	13,102,046
Filberts—not shelled.....lbs.	7,365,637	10,026,861	10,084,867	8,375,800	8,586,278	10,36,072	10,822,248	10,003,552	16,468,547	7,432,524	16,747,349	14,865,364	14,082,536
Shelled	1,364,689	1,413,391	2,332,606	1,368,835	1,450,620	1,798,147	1,722,705	1,259,540	2,280,757	4,245,663	3,778,906	4,711,293	4,233,107
Marrons, crude.....lbs.		10,270,398	9,968,879	14,845,343	10,157,321	18,849,257	12,549,959	15,754,796	6,275,030		5,021,146	29,484,657	23,340,988
Olive nuts, ground.....Dollars	\$590	\$478	\$236	\$206	\$312	\$385	\$25	\$112				\$132	\$169
Palm and Palm Nut Kernels	\$2,752	\$6,907	\$5,744	\$7,970	\$4,872	\$23,127	\$31,900	\$1,104,885	\$626,435	\$16,905,313	\$5,610,056	\$8,329,034	\$230,194
Peanuts or Ground Beans.....lbs.	7,326,371	11,297,172	11,055,823	12,660,433	12,140,612	17,298,778	14,075,387	9,623,411	7,710,062	1,970,797	5,667,354	7,222,496	4,803,677
Shelled	1,302,919	16,089,919	7,821,505	3,127,829	7,823,173	21,819,101	11,695,507	15,739,888	27,548,928	67,746,831	24,179,687	103,552,486	39,406,853
Pecans.....lbs.	1,490,289	3,349,460	2,333,037	2,607,227	1,803,434	2,621,161	2,032,539	1,265,382	4,076,333			2,194,620	1,082,390
Walnuts—not shelled.....lbs.	17,432,883	23,269,374	21,146,116	22,208,845	16,363,046	16,134,211	20,985,326	22,610,418	17,177,892	3,304,003	21,235,078	17,339,096	31,821,639
Shelled	8,781,908	10,960,968	11,244,054	10,713,286	10,083,622	11,636,053	10,532,956	13,445,790	12,257,593	9,707,401	10,260,969	13,972,917	18,264,069
All other shelled or unshelled, not specially listed.....lbs.	9,938,337	3,584,544	2,962,663	3,050,989	3,600,056	7,426,313	3,272,492	2,772,589	2,769,634			3,763,973	3,880,676
Total of nuts imported.....Dollars	\$8,549,997	\$12,775,196	\$14,265,572	\$15,626,483	\$13,508,307	\$19,815,713	\$16,865,244	\$20,594,434	\$33,697,688	\$49,930,283	\$57,499,09	\$58,732,801	\$37,378,572

a—pounds.

Nut Culture Information

Reprint folders on topics discussed in American Nut Journal. 10 Cents Each

Grafting and Budding the Walnut—U. S. Dept. Agriculture.
 Pecan Areas of the United States—W. P. Reed.
 Walnut Trees For New England—Dr. Robert T. Morris.
 Some Walnut Varieties—Dr. L. D. Batchelor.
 Chip Buds For Nut Trees—Charles L. Edwards.
 Grafting, Budding, Topworking—Dr. W. C. Deming.
 Breeding Chestnuts for Disease Control—U. S. Dept. Ag.
 Advent of Nuts as Staple Food—Dr. J. H. Kellogg.
 Underworking Nut Trees—Charles L. Edwards.
 The Ubiquitous Black Walnut—T. P. Littlepage.
 Average Yield of Pecan Orchard in S. W. Georgia.
 Value of Nuts As Food—Dr. W. C. Deming.
 Improved Black Walnut a Good Investment—Henry Stabler.
 Status of Pecan Industry—C. A. Reed, U. S. Nut Culturist.
 Sources of Supply of Hazel Nuts—Bulletin Imperial Institute.
 Top-Grafting the Walnut Tree—Ferd Gröner.
 Black Walnut As a Meat Producer—Henry Stabler.

Outline of Northern Nut Culture Activity—Dr. W. C. Deming.
 Establishing the Filbert Grove—George Dorris.
 Top-Working Northern Pecan Trees—J. F. Wilkinson.
 Nut Trees for Highways and Public Places—W. S. Linton.
 American Nut Culture—24-page Pamphlet Survey.
 East Texans Reap Fortunes on Pecans.
 Hazel Blight—Dr. Robert T. Morris.
 American Nut Industry—C. A. Reed, Nut Culturist.
 What Nuts to Plant in Northern States.
 Pecan Rosette; Practical Treatment—W. A. Weaver.
 English Walnut: Where To Plant It.
 Nut Tree Grafting by an Easy Method—Dr. Robert T. Morris.
 Purchase of Chestnut Tree With Reference to Blight—G. F. Gravatt.
 Quick Results in Pollenizing Pecans—E. E. Rislen.
 Nut Trees to Reduce Food Costs—Chas. Lathrop Pack.
 How To Guard Against Faulty Nuts—Harvey C. Stiles.
 The Romance of the Pinon Nut Industry in New Mexico.
 Soil Fertility; Fertilizer Problems in Pecan Culture—J. J. Skinner, U. S. Department Agriculture.
 The Future of the American Grown Filbert—Richard H. Turk.

AMERICAN FRUITS PUBLISHING CO., 39 State Street, Rochester, N. Y.

NORTHERN NUT GROWERS ASSOCIATION IN ANNUAL SESSION THIRTEENTH CONVENTION—ROCHESTER, N. Y. SEPTEMBER 7-9, 1922

AN attendance of seventy-five marked the thirteenth annual convention of the Northern Nut Growers Association at the Osburn House, Rochester, N. Y., September 7-9, 1922. A program which occupied the full time of two days and a half was followed almost in its entirety. There were present members from Utah, from Georgia, from California, from New England, from Canada and from various states.

J. M. Patterson, Putney, Ga., responded to the address of welcome by the mayor of Rochester; Harry Weber, Cincinnati, O., to that of the president of the Chamber of Commerce. The address by President James S. McGlennon was followed by the presentation of reports by the secretary and treasurer. Secretary Deming offered biographical sketches of the late Dr. Van Fleet and Colonel Sober and read the address by Dean Watts of the State College, Pennsylvania, which was given at Lancaster, Pa., convention last year, emphasizing the valuable suggestions therein.

A letter from G. F. Gravatte, U. S. Dept. Agr., was read by Secretary Deming, showing that chestnut blight is extending South and West; it is in seven counties in Ohio, thirty in North Carolina and in one orchard in Indiana. If the blight is removed at once upon discovery there is chance to check it. Secretary Deming read an extract from a letter sent by U. S. Nut Culturist C. A. Reed who is in China investigating the so-called Manchurian walnut industry.

E. L. Wyckoff, Aurora, N. Y., showed a branch bearing nuts taken from an Indiana pecan tree on his grounds. P. H. O'Connor, Bowie, Md., reported promise of heavy bearing by an Indiana pecan tree at the Littlepage farm. George H. Corsan, Canada, who travels through the states said that there had seldom been such a large crop of hickory nuts as this year in the northern states. Dr. Deming brought a branch from the big Hartford pecan tree, bearing two nuts. He said there had been reported to him a pecan tree in full bearing at Rocky Hill, Conn. A communication from H. P. Mosnat, Chicago, Ill., suggested the experiment of grafting curly walnut on black walnut for use of the wood.

Upon motion of Harry Weber the Association voted to take membership in the American Pomological Society.

Treasurer Bixby reported a deficit of \$6.80 which was promptly made up at the convention. Thirty-eight new members were reported. Since the Association was started there have been enrolled 561 members. Only half that number are now on the rolls. President McGlennon brought up the subject of increased membership which has been uppermost in his mind for some time. He urged that many more members be obtained. His annual address stressed this point. J. M. Patterson suggested as the most practical way the pledging of membership accession by present members and the advancing of the membership fees; each member reimbursing himself by procuring memberships to the amount of his payment in advance. Henry D. Spencer, Decatur, Ill., said that doubtless more members

could be gained quickly by arousing interest in communities in what nut culture will do for those communities. For instance, in one county in Illinois there are 20,000 acres of waste land which cannot be ploughed but which might be used for nut culture. "It is the hardest thing to start a new idea," said Mr. Spencer. "And probably there are none so conservative generally as are agriculturists."

These committees were appointed:

President's address—Messrs McGlennon, Olcott, Deming, Bixby, Jones

Resolutions—Dr. Morris, Dr. Deming, Messrs. Patterson, Jones and Rick.

Nominations—Harry Weber, Dr. Morris, Messrs. Rick, Patterson, Corsan.

Prof. R. H. Taylor of the California Almond Growers Exchange, outlined methods adopted by the Exchange for procuring additional members. Mr. Corsan suggested that the *American Nut Journal* on file at libraries would attract attention to the work of the Association. The *Journal* is now on file in libraries in various parts of the country.

As further means to attract persons to membership, Secretary Deming suggested lectures on the subject of nut culture and the work of the Association, by members. He cited Mr. Spencer, Dr. Morris, Mr. Bartlett, Mr. Corsan, C. A. Reed as having already done much in this direction. Dr. Deming has been active in this line also, for years, besides writing articles for general publications.

President McGlennon said he would guarantee one hundred new members through his office—if the other members would procure ten each. Afterward he explained that he meant the members at this convention. Thereupon Messrs. Weber, O'Connor, Jones, Morris, Patterson, Wyckoff, Pomeroy and Olcott, and Mrs. Ellwanger pledged sums of \$5 to \$10 at once with the understanding that they could reimburse themselves by procuring the corresponding memberships.

At the Thursday evening session Mrs. W. D. Ellwanger showed opportunities for women in nut culture by outlining briefly her experience with nut trees at her farm near Pultneyville, N. Y., on the lake shore. She has growing there Persian walnuts, black walnuts, hickories and Paragon chestnuts; also some Northern pecans. She has learned many things about nut trees as the result of this experience and will improve upon earlier practice when she plants again. She is an enthusiastic and valued member of the Northern Association. Mrs. W. C. Deming, who was not present, sent a spicy communication in response to the program announcement of her subject, "Encouragement to Wives of Members." She thought real encouragement is needed from wives in cases where husbands hold out the promise that a family of five children can be brought up and educated in these times on the proceeds of an eight or ten-year-old Persian walnut tree. She had found it difficult to apply encouragement directly on account of the long absence of a nut enthusiast who seemed to be getting plenty of stimulation from the fascination of trailing an elusive

five rare variety of nut tree hundreds of miles from home, regardless of the passing of time.

J. M. Patterson, Putney, Ga., president of the Georgia Paper Shell Pecan Association, producers on a large scale of the Crown Brand pecans, the largest producer and shipper of paper shell pecans in the world, discussed the possibilities of commercial nut culture along lines with which our readers are familiar, through Mr. Patterson's previous discussion of this subject.

One of the most valuable of the papers presented at this convention is that by Mr. Bixby, covering the program subject in general and his own selection of a title in particular, "The Experimental Nut Orchard." This paper will be given in a succeeding issue. Dr. Morris talked on "Pioneer Experience and the Outlook," and gave hearty encouragement to nut workers in the North, in view of great strides made. Dr. J. H. Kellogg, Battle Creek, Mich., sent a paper on the value of nuts as a dietary staple, which will appear in the official proceedings. He was unable to be present. Asst. Supt. John Dunbar of the Rochester Park Department gave information regarding nut trees in Rochester parks which was supplemented by visits to these trees. Prof. Ralph H. Taylor, Los Angeles, Cal., of the California Almond Growers Exchange, discussed prospects for almond culture in the East.

At the Friday morning session Conrad Vollertsen presented a paper on the improved filbert. This was discussed by Dr. Morris, Mr. Bixby and Mr. Bartlett. "I feel that we have little to fear from filbert blight," said Mr. Bixby. "If it does appear it can be controlled by cutting it out on first appearance." That was the gist of Mr. Vollertsen's paper. Joseph H. Smith, Providence, Utah, said the hazel had been under his observation in Utah for ten years and there had been no evidence of blight. The illustration of hazel blight shown in the April 1920 issue of the *American Nut Journal* in connection with a discussion of the subject was referred to by Mr. Bixby. A copy of that issue of the *Journal* was shown to members present.

Dr. Deming's paper on "Top-working the Hickory" was at his suggestion read by title and will appear in the official proceedings, as it was too long for presentation in the limited time of the session. Albert C. Pomeroy, Lockport, N. Y., talked on the development of his Persian walnut orchard from which, with the parent tree, he expects to harvest a crop of 6,000 pounds this fall. After the convention a number of the members visited the Lockport orchard.

A most interesting address was that by Prof. James A. Neilson, Guelph, Ontario, Canada, who for years has been studying the subject of nuts as related to Canada. He has found abundant evidence that nut culture can be made successful commercially in lower Ontario districts as shown by the existence of bearing nut trees there of various kinds. He finds much interest in the subject among Canadians and it is probable that a branch of the Northern Nut Growers Association will be formed in Can-

ada under Prof. Nelson's direction. George H. Corsan outlined his observations as to nut growing in Northern states and in Canada, as the result of his traveling from point to point in the course of his business as Y. M. C. A. instructor.

At Friday evening's session President McGlennon read letters from J. Russell Smith, Swarthmore, Va.; H. J. Hilliard, Sound View, Conn.; Prof. C. P. Close, Washington, D. C. and Dr. W. A. Thomas, Lincoln, Neb., who were not present.

The question of increased membership in the Association was discussed in committee of the whole at the suggestion of Secretary Deming. J. F. Jones offered to give Chinese Mayette and Franquette walnut seedling trees as premiums for membership—one to each new member—up to the number of 500. Mr. Snyder said the Minnesota Hort. Society had secured many members by gifts of fruit trees. Mr. Spencer said that 114 nut trees had recently been placed in the hands of appreciative persons in his city of Decatur, Ill. He believed more could be used to advantage.

Mr. Bixby questioned the advisability of so distributing seedling nut trees, since the Association had firmly held to the idea that only the planting of grafted or budded nut trees should be encouraged. Secretary Deming thought that the proposed distribution of seedlings might be accompanied by a statement which would emphasize the importance of planting the propagated tree after interest in nut culture had been aroused by the seedling tree. Mr. Jones said his idea in offering the seedlings was to endeavor to get new varieties. Mr. O'Connor suggested that prizes be offered for any resulting good varieties.

It was urged that members write articles for the magazines to stimulate interest in nut culture. President McGlennon suggested that a membership in the Association would be an appropriate Christmas present to a friend.

Upon the report of the nominating committee the officers were re-elected for another year:

President—James S. McGlennon, Rochester, N. Y..

Vice-President—J. F. Jones, Lancaster, Pa.

Secretary—Dr. W. C. Deming, Hartford, Conn.

Treasurer—Willard G. Bixby, Baldwin, N. Y.

It is presumed that the executive committee and the state vice-presidents also hold over.

It was decided to hold the fourteenth annual convention in Washington, D. C. on Sept. 26, 27, 28, 1923.

The outings in connection with the convention were greatly enjoyed. On Thursday afternoon visits were made to the nut trees in Highland park, Jones Square, Maplewood park and Riverside cemetery, and to the McGlennon-Vollertsen Filbert Nursery in the town of Greece where photographs of the members among the improved filbert plants were taken. The work of introducing German varieties and the evidence that the plants are thus far frost proof and free from blight caused deep interest on the part of the visitors. Printed lists of the varieties were distributed and Mr. Vollertsen was on hand with Mr. McGlennon to explain details and to answer the many questions asked.

On Friday afternoon the members were entertained at luncheon at the farm of Mrs.

W. D. Ellwanger where nut trees were also seen.

On Saturday morning there was a formal planting in the name of the Association, under the direction of Assistant Superintendent Dunbar of one of the Persian walnut trees from Mrs. Ellwanger's farm and an Arkansas black walnut from the park nursery, in Highland park. The principal address was made by Dean Moon of the New York State School of Forestry, Syracuse, N. Y. An address was also made by Mr. Bixby. President McGlennon presided. Dean Moon promised cordial assistance in extending the planting of nut trees and welcomed the offer by Messrs Bixby and Dunbar to supply nuts and scions for planting in the state reserves.

Among those in attendance were the following:

Dr. Robert T. Morris, New York City.
Dr. W. C. Deming, Hartford, Conn.
Mr. and Mrs. W. G. Bixby, Baldwin, N. Y.
J. F. Jones, Lancaster, Pa.
Mr. and Mrs. J. M. Patterson, Putney, Ga.
S. W. Snyder, Center Point, Iowa
Harry R. Weber, Cincinnati, Ohio.
John Rick, Reading, Pa.
Jas. A. Neilson, Guelph, Canada.
Joseph A. Smith, Providence, Utah.
Harry D. Whitner, Reading, Pa.
Henry D. Spencer, Decatur, Ill.
Mr. and Mrs. Samuel L. Smedley, Newtown Square, Pa.
George H. Corsan, Islington, Ontario, Canada.
Mrs. George H. Corsan, Central Y. M. C. A., Brooklyn, N. Y.
Jacob E. Brown, Elmer, N. J.
W. R. Fickes, Wooster, Ohio.
W. J. Strong, Vineland Station, Ontario, Canada.
P. H. O'Connor, Bowie, Md.
Adelbert Thomson, East Avon, N. Y.

A. B. Pomeroy, Lockport, N. Y.
F. A. Bartlett, Stamford, Conn.
Mr. and Mrs. S. H. Graham, Ithaca, N. Y.
E. L. Wyckoff, Aurora, N. Y.
M. G. Kains, Suffern, N. Y.
Mrs. J. B. Comstock, Hollywood, Cal.
Joseph Baker Comstock, III, Hollywood, Cal.
Mr. and Mrs. E. A. Hoopes, Penn.
Mr. and Mrs. J. S. McGlennon, Norma McGlennon, Mrs. W. D. Ellwanger, John Dunbar, R. E. Horsey, John P. Lauth, Mr. and Mrs. J. B. Rawnsley, George B. Tucker, Mrs. C. R. Nolan, D. D. Culver, M. L. Culver, C. A. Vick, Miss K. Dugan, W. J. Nolan, Mr. and Mrs. Fred Garrison, Mr. and Mrs. Clifford Spurr, Miss K. M. Pirrung, Miss Ida Schlegel, Alois Piehler, Miss Robena Murdoch, John Herringer, Mr. and Mrs. Conrad Vollertsen, Elwood D. Haws, Mr. and Mrs. Ralph T. Olcott, Rochester, N. Y.

Black Walnut in Minnesota

Carl Weschcke, St. Paul, Minn., relates the following experience:

"In May 1921 I planted a dozen each of Beaver hybrid and Black walnut trees along with one Lancaster heartnut. These were all grafted trees and first class stock. All the hickories with the exception of one killed back to the ground line and the Lancaster heartnut died back to old growth. On the other hand the Black walnuts all lived and showed no signs of the winter temperature. I am convinced that these little trees will bear in a few years, as my experience in grafting this variety of Black walnut on wild butternut trees would tend to prove this. I am convinced that I shall be able to obtain a market at a substantial profit for the kernels of these nuts because the retail stores are selling them for \$1.50 per lb."

If it relates to nut culture it should be in the AMERICAN NUT JOURNAL. Please send it in.

Twenty-first Annual Meeting of the

NATIONAL NUT GROWERS ASSOCIATION

At Thomasville, Ga., Oct. 3-5

Results of Two Decades of Commercial Pecan Culture Will Be Reviewed by Leading Growers. Marked Expansion of the Industry Will Be Shown In Addresses by Experts in Various Phases. Interesting Program.

National and State Government Aid and Plans for Rapid Extension. Marketing and Distribution. Bearing Groves in the Heart of Commercial Pecan Orcharding To Be Visited. Headquarters at Tosco Hotel. Secure Reservations.

Full Particulars May Be Had from

PRESIDENT
CHARLES A. SIMPSON
Monticello, Florida

SECRETARY
J. LLOYD ABBOT
Spring Hill, Alabama

President McGlennon's Address

Before the Northern Nut Growers Association
Sept. 7, 1922, Rochester, N. Y.

Your President recommends that definite action be taken to the end of increasing our membership to the still further end of exemplifying the truth of the old saying that "in union there is strength." More members mean the spreading of our gospel over greatly increased areas that should be interested in nut culture. The present membership is approximately 250, an increase of only 24 since the Lancaster Convention in October last year. And while it is also an old and true saying that "self praise is no recommendation," the fact remains that 18 of these new members were secured through my office.

It has been suggested at previous conventions that a systematic campaign for members can be operated through organized co-operation by our state vice presidents. I believe this to be the most efficacious medium through and by which the greatly desired results can be obtained. Of many, I am sure, systems that can be employed to such end, there are two that always appeal to me as most desirable. Doubtless you all have thought of them at some time or other; in fact I have heard at previous conventions casual mention of the second. But the first I have heard little if anything of, and it is, that effort should be exerted to interest women more actively in nut culture. We have a few women members. Why shouldn't there be as many women as men? I can think of no reason why there shouldn't. I believe that women are just as competent as men to conduct any feature of nut culture, with the possible exception of specific manual labor. And I can think of no more delightful vocation for women who love the great and wonderful outdoors—and where is the woman who does not?—than nut culture—the cultivation of nut trees and bushes—beautiful things, not only for the grace and beauty of trunk and limb, foliage and flower, but their real substance—their fruit—nuts, one of the most nutritious foods for human beings. More and more nuts are being consumed every day, and I venture to say that their consumption as a leading item in our food dietary is only in its infancy. So I feel that here is another opportunity for our women to demonstrate the justice of her recent acquired suffrage in our National affairs.

The other possible source of membership I have in mind is a systematic campaign to enlist the interest and co-operation of school teachers. Just think of the possibilities of such a campaign! School teachers, every one being the highclass people they necessarily are, would respond finely, I'm sure, and serve as a most desirable medium through and by which that very potent additional force can be reached, namely, the pupil. What parent would refuse a child's request to enable him or her to participate in the planting of a tree!

There are, of course, numerous other ways that can be employed to get new members. Another I might mention is that of offering suitable prizes; but I urge you to action, definite and specific, along this line, that our Association may better ably execute the worthy ambitions in which it was founded in 1910.

Then, again, more members mean more money. With more money we can get along faster. "Procrastination is the thief of time," you know. I trust that real action will be taken at this convention to the end

of increasing our membership to at least one thousand by the time of the 1923 convention. It can be done—yes, easily. If only each member would pledge himself or herself to get three new members during the year the 1923 convention would find us with the desired membership; and I am sure that a considerable excess would be found on the roll at that time.

Also, increased membership is desirable to the end of increasing subscriptions to, and widening the scope of our official organ, the *American Nut Journal*—the only publication of the kind in the country. Under the able editorship of that Roman—one of our most earnest and intelligent members—Mr. Ralph T. Olcott, it is a power for good in the interests of nut culture. It can be made an ever greater power with a materially increased subscription list, and I know that I speak for my friend, Olcott, when I say that he is ready and willing to expand the Journal's columns as will be required, of course, by the expansion of nut culture. I believe I voice the general sentiment of our membership when I say that no more welcome messenger comes to us each month than the *American Nut Journal*.

Another recommendation I am going to offer is, that the Association consider the advisability of establishing a Nursery at a point agreed on as best adapted for the propagating and nursing of such nut trees and bushes as it endorses as suitable and desirable for the area of country naturally governing the origin of our title—Northern Nut Growers Association. This recommendation originated in thought of a casual remark made to me recently by our esteemed member, Mrs. W. D. Ellwanger, while a visitor at her charming summer home, Brooks Grove. Viewing her Nursery of several thousand black walnut seedlings she casually mentioned that she would be very happy to present to any one desirous of planting such trees any consistent number he or she desired. As my thought dwelt on the expression of such a splendidly magnanimous nature I began to wonder, if a lady was willing to perform such a noble act, why not the Association elaborate on the worthy plan along the lines I have suggested. And with more members, and, thereby, more money, we can do it. Then the Northern Nut Growers' Association is doing a real thing—something tangible—something that will attract new members in a way, nothing else would, because people would then be able to see the living evidence of the practicability of our ideals. We could start in small way, and grow. But after long and earnest thought on the subject I came to the conclusion that it was worthy of our consideration and I trust that it will be given at least that.

From Mrs. Ellwanger's reference to "Johnny Appleseed" I believe that she found precedent for her nut tree Nursery initiative in the work of inestimable value to posterity done by that same worthy. If the legend be true, he worked with much happiness of heart, but not more so than that of Mrs. Ellwanger, I am sure you will agree, when I tell you that many of her Nursery trees are growing from nuts she garnered from road-side and field trees manifesting some exceptional trait, or indicating rare strain.

And I cannot refrain from urging action to the end of influencing our other states to pattern after good old Michigan in our effort to enact legislation, as she has done, providing for planting our road-sides with nut-bearing trees. It is something tangible, like this, that really counts. I believe that it

is a fundamental of life, and living, that precedent, pro or con, is invaluable as governing subsequent action along similar lines. Here we have, in Michigan's action, a most worthy precedent, and I can think of no good reason why Our other states should not do likewise. And, I believe that this association, functioning efficiently, can exert the necessary influence to bring about a similar condition in Our other states. My emphasis of the word *Our* means the Northern Nut Growers Association's states, you know.

I just wish to mention in passing that the author and collaborator of the Michigan road-side planting of nut trees legislation are our esteemed members, Senator Harvey A. Penney, and the Hon. Wm. S. Linton, respectively, both of Saginaw, Mich.

In closing I desire to refer to our wealth, as an Association, in scientific lore. The Association is particularly well equipped in having a faculty, so to speak, than which there is none better in the country,—yes, the world,—in whose hands our recommendations, to the planter of nut trees, can be entrusted with absolute safety. For genuine scientific research in Nut Culture of the Northern States this Association stands singly and alone. This tribute is born of vivid remembrance of the really scientific work done by several of our worthy members, notably, Jones, Bixby, Morris, Deming and Vollertsen. To them, especially, I salute.

Some Facts About Blight

Address by Conrad Vollertsen before Northern Nut Growers Association, Sept. 1922.

According to our program, I have been assigned to make a few remarks on: "The Blight-proof Propagated Filbert," a subject I think rather hard and uncertain to discuss as we have so far no positive proof that blight, if it at all exists on the improved filbert varieties, will not eventually appear on varieties we are growing at the present time; I therefore believe the subject should have been worded somewhat different, as we have no assurance when blight may appear, nor any guaranty against its appearance; it may fall on our plants over night, or at any time; that we can not prevent nor control.

In our Nursery of improved European filberts which we have maintained for ten years, blight is so far not known and has never made its appearance, though some of our plants have grown there ten years; we know other filbert plants, several varieties, all of German origin, in this our home city, from thirty to forty years old, never effected by blight, bearing nuts today. But all of this will not guarantee the improved propagated filbert to be blight-proof. We certainly do not claim our propagated improved filberts plants are blight-proof; in fact, to our knowledge there is no such a thing as blight-proof filberts, no more than there are blight-proof pears, quinces or other fruits. But we do claim that our improved filbert varieties, imported from Germany, will stand our climatic changes very much better and will resist the attack of blight to a greater extent, than any other variety imported from France or Italy.

We really do not fear blight. We have heard very much about it and have so far seen nothing of it. But should it eventually appear in our Nursery or among our stock-plants, I am fully convinced we can easily control it and prevent its spreading, by cutting the affected parts thoroughly away, removing the diseased twigs or branches so low as to make the cut in entirely sound



WELL-KNOWN MEMBERS OF THE NORTHERN NUT GROWERS ASSOCIATION

(Left to right): Willard G. Bixby, Baldwin, N. Y., Treasurer; J. F. Jones, Lancaster, Pa., Vice-President; James S. McGlennon, Rochester, N. Y., President; Ralph T. Olcott, Rochester, N. Y., Editor AMERICAN NUT JOURNAL; Dr. Robert T. Morris, New York City, former President; Dr. William C. Deering, Hartford, Conn., Secretary.

wood. Through such an operation, I am fully convinced, the disease can be completely eliminated in a comparatively short time, should it ever appear.

We have been repeatedly told blight will not only attack small parts or branches of the improved filberts, but will kill them entirely. Such a thought I can never entertain, not for a moment; I have had too many years practical experience with the growing and cultivating of improved hazel or filbert plants, and never seen anything of the kind. It would be very interesting if members of this Association who had the opportunity to observe blight on the improved hazels and seen plants actually killed by that disease to relate their experiences, and the real facts of it, so as to enlighten the public on the subject. For instance:

Where did it happen that blight killed the plants entirely?

What varieties were attacked and killed?

And was it genuine blight that killed them?

These questions should be well considered, particularly the last one, as it is a well known fact that in a general way the term blight is frequently used for various injuries or diseases of plants causing the whole or parts to wither and die, whether occasioned by insects, fungi, or atmospheric influences.

We will, in the early summer, occasionally see on various shrubs or trees numerous little twigs and branches dead and decaying; and the general saying then, will most assuredly be, the shrub or tree is blighted, where a close and thorough investigation will not reveal the slightest sign of blight; merely injury by frequent climatic changes in the late winter—or early spring months.

I have also observed the same thing, where insects were the cause of all the trouble. A little downy species of the aphids or plant-louse, had completely over-run a stump apple tree and really caused it to die. The owner told me that tree was blighted, that it would die. But here, also, no sign of blight could be detected; nothing but insects caused the tree to die; not blight.

I merely mention these instances to show how thoughtlessly and readily a disease or ailment of a tree or shrub is called blight, where in reality not the slightest sign of it could be discovered.

If our people had the understanding and would take the time to investigate the cause of their diseased trees, I am fairly satisfied

the complaining of trees or shrubs being killed by blight would not be heard as freely as it is today, because in a number of instances trees or shrubs are dying of other causes under the name of blight.

Now, under no circumstances should this be construed as meaning that I dispute or doubt the existence of blight among our filbert plants. Not at all. Quite the contrary. We have, as stated above, so far no blight-proof filberts, and no guaranty that blight will not eventually attack our plants. We, therefore, will have to be more or less on the alert; will have to watch our filbert plants as we do our pear or quince orchards or other fruit trees more or less inclined to blight. By no means let blight discourage the planting of filbert or hazel nuts, as I am fully convinced, should it eventually appear, it will not kill our plants; in fact it will not harm them as much as it will our pear trees, our quinces or other varieties of fruit inclined to that disease, of which we, in spite of blight, plant and maintain large orchards.

My advice would be to stop all talk on blight, wait until it appears. Do not let us cross the bridge before we come to it, but let us watch our trees inclined to blight, particularly our hazel and filbert plants, as they are not blight-proof. Should blight make its appearance, let us be ready for it, fully prepared to receive it; not to welcome it, but to eliminate it; and that we can do very thoroughly through the operation as set forth in the beginning of this paper.

CONRAD VOLLERTSEN.

In Chester Co.,

Editor American Nut Journal:

Noticing your request as to names of owners having stands of nut trees caused me to mention the fact I have 12 to 15 acres devoted to nut culture on my Lynn-Mead Farms in Chester County, Pa., approximately 30 miles west of Philadelphia. I planted my nut orchard two years ago and have it in three groves comprising English walnuts, (V. Franquette, V. Mayette, Rush, Holden, Hall) black walnuts (Thomas and Stabler), Japanese walnuts (Lancaster heart nuts), Beaver Shagbark (Hybrids), Green River pecans, Butterick pecans, Marquardt pecans, filberts (Kentish Cobs, Cosford; Barcellona and the improved European filberts which are being developed in this country by Mr. Conrad Vollertsen, such as Red and White Lamberts, Italian Red, Large Globe Hal-

lersche Riesen, Altholdeus Leben.

My orchard is showing better now as last season's drought caused quite a number to die; but the mulching of last year and this year coupled with our numerous showers this summer is having a decided influence for growth. I have one grove planted mostly to Japanese walnuts or Lancaster heartnuts and a few shagbarks and pecans at distances of rows 44 ft. apart and 40 ft. apart in rows; then I have the filberts between rows practically taking up the entire space.

My observations so far point to the Mayette as having an excellent root system, and withstanding last year's drought fine and making good growth. The Rush is doing well also. The Lancaster heartnut is showing up its sturdy qualities and making good growth. The Beaver shagbark and Stabler black walnut are worthy of mention for growth now.

A number of filberts planted last fall were caught by the frosts this spring, but I think will pull through all right next year. I have observed some attacks of curculios on young shoots of black walnut and shagbark. I have had mushroom manure spread lightly around the trees and I have cultivated one field, that is I followed rotation while another grove I have left in old sod field. The grove in cultivated field is doing good. I will be better able to make a decision as to best growth of the groves later.

I might mention also, if of any value, that I am running in conjunction a 25 acre pecan grove which is known as the Penn-Croft Pecan Grove. It is located on the Dixie Highway near Thomasville, Ga. My trees look now that I would have about same yield as last year. The humid spell caught them and caused a shedding.

I must state I am confident that there is a future for the northern orchard of northern varieties just as the southern orchard of southern varieties has shown.

A. W. MINSTER,
318 W. Miner St.,

July 27, 1922. West Chester, Pa.

A Chinese colony has bought 1,000 acres in Obion county, Tenn., near Trimble. Fifty Chinese families will take possession January 1, 1923. Truck farming on a large scale will be engaged in and a good part of the land will be planted to blackberries, strawberries and grapes.

American Nut Journal

COVERING NUT CULTURE

NORTH—SOUTH—EAST—WEST

AMERICAN FRUITS PUBLISHING CO., INC.
50 State Street - Rochester, N. Y.

RALPH T. OLCOTT, Editor and Manager
Official Journal Northern Nut Growers' Assn
Official Journal National Nut Growers' Assn

SUBSCRIPTION RATES

One Year, in advance.....\$2.00
Canada and Abroad..... 2.50
Single Copy20

ADVERTISING RATE

Per column inch.....\$2.80
Forms Close 10th of each month

ROCHESTER, N. Y. SEPT., 1922

NUT ASSOCIATIONS

California Almond Growers' Exchange—
President, G. W. Pierce; manager, T. C.
Tucker, 311 California St., San Francisco.

California Walnut Growers' Association—
President, C. C. Teague; secretary, W. T.
Webber; manager, C. Thorpe, 1326 East
Seventh St., Los Angeles, Cal.

Georgia-Florida Pecan Growers Association—
President, J. M. Patterson, Putney,
Ga.; vice-pres., A. C. Snedeker, Blackshear,
Ga.; sec'y-treas., J. S. Wight, Cairo, Ga.

National Nut Growers Association—Pres.,
Charles A. Simpson, Monticello, Fla.; vice-
pres., J. M. Patterson, Putney, Ga. and E.
C. Butterfield, Winona, Tex.; secy., J. Lloyd
Abbot, Spring Hill, Ala.; treas., J. Slater
Wight, Cairo, Ga. 1922 meeting, Thomas-
ville, Ga., Oct. 3-5, 1922.

National Pecan Growers' Exchange—
President and manager, William P. Bullard,
Albany, Ga.; vice-pres., J. B. Wight; secy-
treas., A. D. Galt.

Northern Nut Growers' Association—
President, James S. McGlennon, Rochester,
N. Y.; vice-pres., J. F. Jones, Lancaster,
Pa.; treas., Willard G. Bixby, 32 Grand Ave.,
Baldwin, N. Y.; secy., Dr. W. C. Deming,
Georgetown, Conn. 1923 convention, Wash-
ington, D. C., Sept. 26-28

Southeast Georgia Pecan Association—
President, Dr. W. H. Born; vice-pres., Col.
G. H. Harris; secy., J. H. Girardeau, McRae,
Ga.; treas., E. F. McRae.

Texas Pecan Growers' Association—Presi-
dent, H. G. Lucas, Brownwood; vice-pres.,
John P. Lee, San Angelo; Secretary, Oscar
Gray, Waxahachie.

Western Nut Growers' Association—Presi-
dent, Ferd Groner, Hillsboro, Ore.; secy-
treas., C. E. Schuster, Corvallis, Ore.

R. A. Harris, Riverside, California, is the subject of an interesting article on pioneer pecan culture in California, in a recent issue of the Los Angeles Times, extracts from which we hope to present to our readers in the near future. Mr. Harris is endeavoring to determine the merits of the final tree at the seedling stage and to eliminate 99% of the work of developing meritorious varieties. He has 20,000 seedlings under observation, ten or twelve of which give much promise.

Dr. Robert T. Morris, New York City, writes that F. A. Bartlett, Stamford, Conn., has grafted hickories successfully in February. That makes a record of hickories grafted in Connecticut in every month of the year, excepting December and January. Dr. Morris will attempt it in those months.

A. W. Woodruff, secretary of the San Saba Pecan Co., San Saba, Texas, delivered recently an address before the San Saba Chamber of Commerce, which we hope to reproduce in part in a forthcoming issue. The subject is: "Scientific Pecan Culture As Applied to San Saba County."

If it relates to nut culture it should be in the AMERICAN NUT JOURNAL. Please send it in.

THE NORTHERN CONVENTION

The thirteenth annual convention of the Northern Nut Growers Association in Rochester, N. Y., Sept. 7-9, was one of the most successful in every way in the history of the organization. To President McGlennon and his active office staff is due this result. Mr. McGlennon and his associates worked earnestly to make the occasion one of pleasure and profit. All in attendance voiced repeatedly their appreciation of marked results.

An unusually varied program filled every available moment. The attendance was up to the usual mark. Afternoon outings afforded pleasure and instruction.

The proceedings show that steady progress in Northern nut culture is being made. Commercial orcharding in the North is beginning in a small way. The exhibit of nuts in wide variety at this convention by Messrs. Dunbar, Vollertsen, Jones and Deming clearly indicated the possibilities and the papers and addresses showed marked advancement in the number and quality of improved varieties.

The next step appears to be the production of Nursery stock for commercial planting and the interesting of many more persons in the work of the Association. President McGlennon, who was unanimously re-elected, will continue vigorously his special work of increasing the membership from 250 to 1000 in the coming fiscal year. The attendance at the Washington, D. C., meeting September 26-28, 1923 ought to be at least double that in Rochester which was about 75.

CULTIVATED ORCHARDS IN TEXAS

The native pecan crop of Texas constitutes a problem which other pecan states do not have to face. It is so large under normal conditions as to warrant some form of organized marketing in an endeavor to obtain a really appropriate price—through grading, cracking, etc. At the same time the centering of organized activity on the disposition of the native crop tends toward losing sight of the desirability of definite organized activity at the present day in behalf of the cultivated pecan, to the end that orchards of named varieties may be planted widely now, so as to insure at the earliest possible time crops of commercial nuts to meet the competition in this line from other states.

In other words, there is danger that while those who are interested in pecans in Texas are devoting almost all their time to the problem of handling the crops of wild nuts which can never equal in value the cultivated kinds, time will be lost in competition with other states which are rapidly extending the planting of commercial orchards.

It is the planting of named varieties of pecans in Texas that should engage the best thought among pecan growers. Indeed, the name Pecan Growers Association is otherwise a misnomer. For surely, those who gather the wild nuts or handle them cannot be called "pecan growers" even though they own the land upon which the wild nuts are found. Nature produces native products. Growers, to merit the designation, must plant and propagate, must initiate and cultivate and seek to improve upon the native product.

While doubtless, much may be done to enhance the returns from the large native crop of Texas pecans, by combined effort, it would seem that an organization for that purpose should be designated, for instance, as the Texas Pecan Association, or the Texas Native Pecan Association; while

there should be in lively operation a large and rapidly expanding organization of the pecan growers under the title of the Texas Pecan Growers Association.

Such an arrangement would provide the machinery for the activities of both classes of pecan enthusiasts which developed at the recent meeting in Brownwood and caused considerable discussion.

How would it do to call a special meeting in Texas, at which the two classes could assemble and divide into such respective organizations, elect their officers in each case and proceed separately; co-operating, if thought desirable, along certain lines which might develop?

It might be provided that owners of native trees who top-worked such trees with improved varieties would be eligible as pecan growers.

U. S. Nut Culturist C. A. Reed, who is in China on a federal mission procuring a summary of the walnut industry represented by so-called Manchurian walnut writes that he is procuring much material regarding this important competition with American-grown walnuts. He expects to return soon after the mid-winter holidays. His name in Chinese is equivalent to "Auspicious Goodness."

List of nuts exhibited before the Northern Nut Growers' Association September 7-8-9, 1922, at Rochester, N. Y., by Park Department:

Black Walnut, *Juglans nigra*, United States.

English Walnut, *Juglans regia*, Europe and China.

Western Walnut, *Juglans major*, Western States.

Hybrid Walnut from Washington, D. C., supposed hybrid between *Juglans rupestris* and *Juglans nigra*.

Butternut, *Juglans cinerea*, North America.

Siebold's Butternut, *Juglans Sieboldiana*, Japan.

Juglans cathayensis, China.

Juglans coarctata, Japan.

Winged Chinese Walnut, *Pterocarya stenoptera*, China.

Winged Caucasian Walnut, *Pterocarya fraxinifolia*, West Asia.

King-Nut, *Carya laciniosa*, United States.

Shagbark, *Carya ovata*, North America.

Carya ovata ellipsoidal, United States.

Ash-leaved Hickory, *Carya ovata fraxinifolia*, United States.

False Shagbark, *Carya ovalis*, United States.

Small Fruited Hickory, *Carya ovalis odorata*, North America.

Carya ovalis obovalis, North America.

Carya ovalis obcordata, United States.

Pignut, *Carya glabra*, North America.

Large Pignut, *Carya glabra megacarpa*, United States.

Bitternut, *Carya cordiformis*, North America.

Hybrid Hickory, *Carya Laneyi*, *Carya cordiformis* X *Carya ovata*.

Hybrid Hickory, *Carya Dunbarii*, *Carya laciniosa* X *Carya ovata*.

Beaked Hazel, *Corylus rostrata*, North America.

American Hazel, *Corylus americana*, North America.

European Hazel, *Corylus Avellana*, Eastern Hemisphere.

Beaked Hazel, *Corylus rostrata*, North South Europe.

Manchurian Hazel, *Corylus mandshurica*, Manchuria.

Sweet Chestnut, *Castanea dentata*, United States.

European Chestnut, *Castanea sativa*, Europe to China.

Japanese Chestnut, *Castanea crenata*, Japan, China.

Chinquapin, *Castanea pumila*, United States.

WESTERN WALNUT GROWERS ON THEIR ANNUAL TOUR

By R. E. SHANNAHAN, Salem, Oregon

The annual tour of the Western Walnut Growers' Association was made August 28 to 24th, through the Willamette Valley from Salem to Eugene. Starting with only a few cars, the caravan increased until at Eugene more than 25 cars and between 60 and 70 people were in attendance.

The first day of the tour was devoted to an inspection of the filbert and walnut growers in the vicinity of Salem, Jefferson and Corvallis. The McNary plantation, located on the banks of the Willamette, offered an opportunity to see the resultant effects of the 1919 freeze. The walnut orchard gave the appearance of three or four year old trees until examination of the trunks disclosed the fact that the original trees were cut flush with the ground and new thrift growing sprouts were coming from the stumps.

The McNary filbert planting was one of the largest visited on the tour, comprising several hundred trees, being one of the many indications of the wide interest in filberts throughout the valley.

Eight miles south of Salem on the top of the red hills is the 212 acre Skyline Orchard tract of walnuts with prune fillers. The walnuts are the Franquette variety, 10 years old and bearing a medium crop this year. In this orchard was seen the best up-land cultivation; moisture was at the top and the trees looked especially thrifty. Cover cropping has been practiced with good results.

14 ACRES 30-YEAR-OLD SEEDLINGS

Probably one of the oldest walnut plantings in the state is the Page orchard northwest of Jefferson. There are 14 acres of 30 year old seedling trees which are in good condition notwithstanding the fact that the trees are so close together that the limbs are interlocking, several feet. Last year this orchard produced over seven tons of dried nuts.

The College experiment station deserves particular credit for the extensive pollination work in connection with filberts, conducted by Professor C. E. Schuster. The very unfavorable growing conditions occasioned by the white clay land has made their success even more remarkable. The station filbert planting is composed of a large selection of both commercial and experimental varieties.

Proceeding south to Eugene, the party spent the second day in visiting some of the finest walnut and filbert groves in the country. In the John Thrasher orchard was seen typical sandy river bottom soil coupled with ideal cultivation, producing walnuts planted in a nine year old peach orchard. The supervising feature was that these trees were growing quite vigorously among the 15 year old peaches without being greatly hindered and comparing quite well with those planted alone in an adjacent orchard. One planting of 28 year old walnuts was set out among the stumps, according to the owner at a distance of forty feet. Some of these trees are now producing as high as 250 pounds of dried nuts annually.

Another large planting of interest is the 30 acre walnut orchard of W. A. Lydick. There are 450 trees—120 of which are fillers and as yet non-bearing—yielding an average of six to seven tons. Mr. Lydick has his own drier which has a capacity of nearly one ton of dried nuts every 48 hours. The arrangement of the drier is similar to a hop

drier; a high slat floor on which the nuts are spread with a run of pipe underneath connected with a large furnace. The drying temperature is between 90 and 95 degrees.

That irrigation is beneficial even on sandy soil was seen in the filbert orchard of W. H. Clark. Water was supplied one-half of the planting last year as a test, with the result that the half under irrigation produced one-third more growth than the non-irrigated plot. This year the whole orchard has been successfully irrigated by water lifted by a small pump from the McKenzie river. The sandy type of soil along the rivers in the Willamette valley seem to be especially adapted to the growing of filberts, but with irrigation there is a noticeable improvement.

THE DORRIS FILBERT ORCHARD

Probably no one planting visited by the party was of more interest than that of George Dorris at Springfield. This is one of the pioneer filbert groves in Oregon. Through the kindness of Mr. Dorris, one section of his orchard has been given over to purely experimental work. Prof. Schuster has done some very good work the last three years in pollination and to date finds that the Nottingham is the best pollinator for the Barcelona. After a series of tests

with several of the principal commercial varieties including 60 trees in cross and self pollination, it has been quite conclusively proven that there are at best only three varieties that are suitable pollinators for the Barcelona namely: the Nottingham, Duchilly and White Aveline. Mr. Dorris is particularly proud of his orchard and especially of a few Barcelona trees which have noteworthy production records. One 15 year old tree produced 47 pounds and another 8 year old tree has for its record 24 pounds of cured nuts.

With the Dorris orchards thoroughly inspected the party broke up, with all well pleased with the interest displayed in nut culture in western Oregon. Of particular interest is the large number of new plantings of both walnuts and filberts in the valley. When asked if the nut business would ever be over done, a prominent grower and authority said, "we will never see an over production of nuts in Oregon, our quality excels and the markets are always open for our products."

The walnut crop this year will probably be over 25 per cent heavier than last year, owing to the heavy crop and the new acreage coming into bearing. With practically no blight the crop should be of first quality throughout.

Nuts Will Not Come True to Variety When Nuts Are Planted

By E. A. Riehl, Godfrey, Ill.

I have been much interested in articles on this subject written by Mr. Halbert of Texas, especially in the one published in the August number of the American Nut Journal, in which he argues that nuts will come true to variety from seed, if not pollinated by other trees of different varieties, or at least a large part of them.

I know from actual experience that such is not the case. I also think his arguments are faulty. He quotes the law of atavism, then goes to say: "An egg and a pecan are alike in several particulars. The embryo of each is enclosed in a shell. It takes warmth and moisture to develop the embryo into an active existence. Each while in the shell, is a most concentrated and nutritious human food of the animal and vegetable kingdom. Each egg of the same hen looks just like her other egg and so does the pecan of the same mother tree. Hence you cannot look at an egg and tell in advance whether it will come true or not when the hen is running in a mixed flock. Neither can you look at a pecan and tell in advance whether it will breed true or not, where the mother tree is surrounded by other trees that bear all sizes, shapes and color of nuts. But mate that hen exclusively with a male of her own variety and you can guarantee every egg to come true. Now tell me some scientific reason why the pecan will not breed the same way."

The reason why the pecan or any other nut will not breed true is that the hen has been bred for certain qualities for many generations, while the pecan has not. The pecan has many mongrel ancestors, male and female, that by the law of atavism will be brought to light in its seedlings.

I will here give an example of my own experience with the chestnut, which is not native here, so there is no possibility that

any outside pollen had anything to do in this matter.

Sixty years ago I planted three native chestnuts. When old enough they began to bear and continued to do so as long as there were two trees left. But after one of these last two died the other failed to bear nuts, although loaded each year with burs. About twenty-five years ago when I commenced to study and work on the nut question, I took some scions of Rochester chestnut and put in some grafts in the top of this non-bearing native, expecting that they would furnish pollen to vitalize the native. It turned out, however, that the Rochester bloomed a week to ten days later than the native, so they failed to do as expected. But when the Rochester came into blossom there was enough pollen on the native to thoroughly pollinate the Rochester, causing it to have a full crop of fine nuts, which I planted and later set in orchards.

According to Mr. Halbert's reasoning these seedlings should all have produced nuts of practically the same characteristics. However, such was not the case. Some were larger than either parent and some much smaller. Some were of poor quality, while some were of as high quality as the native parent. Of the thousand or more fruited no two were alike. Why? I take it that the mixed parentage of many previous generations came out in these seedlings. The parents had not been bred continuously for a number of generations, as had the thoroughbred hen and her mate. Neither were Mr. Halbert's pecans, or any other fine nut that is grown or to be found.

For that reason it can not be too strongly emphasized, nor too often repeated, that nuts will not come true to variety, not even if produced on isolated trees, which is not often the case.

Just mention AMERICAN NUT JOURNAL

Digitized by Google

CELEBRATING AN ANNUAL PECAN DAY IN THE BIRTHPLACE OF PECANS

MANY of our readers probably never heard of San Saba county in the state of Texas. Possibly a good many have heard of San Saba pecans, because while their glories have never been sung in the form of an advertising Illiad, they have achieved a measure of fame among the elect who have been privileged to enjoy their wonderful flavor.

San Sabans claim that the first pecan ever heard of—the first that ever were produced, grew in San Saba county. This will doubtless be disputed by proponents of other localities, nevertheless the San Saban stubbornly sticks to his claim, and gives the following reasons:

1. That San Saba county produces more native pecans than any other county in Texas by nearly fifty per cent—that is, one year with another.

2. That San Saba county produces more native pecans than all the states of the Union combined—outside of Texas.

3. That San Saba county has more native pecan timber than any other county on earth; experts have estimated that more than one million native pecan trees are growing within the boundaries of this one county.

4. That San Saba county produces more native pecans of exceptionally large size, high percentage of meat and thinness of shell than any other similar area in the world.

LITTLE DONE ON IMPROVED VARIETIES

One other point, on which the San Sabans are discreetly silent is that almost nothing has been done in San Saba county to produce improved varieties of pecans. The reason given by those who will loosen up and talk is that there are so many native trees bearing such large average annual crops that the landowners of the county have never awakened to the importance of growing improved varieties of pecans as a cultivated crop. However there are signs that the awakening is beginning.

Along last April the San Saba Chamber elected a new president, and one of the first things he did was to read the riot act to the members because they didn't get more action along progressive lines. In appointing chairmen of the various committees, he made this announcement:

"I want you to understand that you are not being appointed to be mere figureheads. If you haven't got a move on within ninety days from date, I reserve the right to remove you and appoint another man in your place. That is to be clearly understood. If you don't like it, don't accept the appointment."

Among other committees appointed was a pecan committee—the first time in the history of the Chamber of Commerce when there had been such a committee. The chairman of the committee is a local merchant; the other members are two pecan growers, the secretary of a new company that is putting out a new product in glass, and the county agent. The latter has taken a course in budding and grafting pecans and is urging land owners to improve their pecan trees.

PECAN DAY ORIGIN

The San Saba Chamber of Commerce holds a monthly meeting at which the members get together to eat supper and then consider the problems of importance to

their community. Each committee has charge of the program for a specified month, and it so befell that the pecan committee was assigned the August meeting.

The members of the committee got together and held a conference. They wanted to make their program something out of the ordinary. The big spring flood had nearly washed away the county fair grounds and it had been decided to abandon the fair for 1922, so the pecan committee conceived the idea of holding an Annual Pecan Day—starting one, rather, because such an event had never been heard of in San Saba county.

The next thing was to get some real pecan talent for the program. Through acquaintanceship of one of the committee members with Col. F. P. Holland of Texas Farm and Ranch, the interest of that genial gentleman was enlisted and he very promptly told the committee that Farm and Ranch would send Judge Charles L. Edwards of Dallas to give them a heart-to-heart talk on pecans. Judge Edwards needs no introduction to readers of the *American Nut Journal*.

The committee also secured the services of Prof. W. B. Lanham of the Extension Service of A. & M. College of Texas, to come and talk on pecan insect pests. (The pesky case-bearer had been eating the insides out of the pecans). Other distinguished guests were A. I. Fabis of the Bureau of Entomology, U. S. Department of Agriculture, and H. G. Lucas, president of the Texas Pecan Growers' Association.

LIVELY LOCAL INTEREST

Then came the question of local interest. Nobody was paying much attention to pecans, except to sell their "pickup" crop in the fall—and in 1919 this amounted to 3,000,000 pounds shipped out of San Saba county. The committee regarded it as necessary to

secure the co-operation of land owners outside the municipality of San Saba. They were told it couldn't be done; that the landowners wouldn't come to a pecan meeting.

Whereupon the committee sent out 125 invitations to that number of prominent landowners of the county asking them to come to San Saba on August 8, 1922, and act on the Welcoming Committee for San Saba's First Annual Pecan Day. They were also invited to be the guests of the Chamber of Commerce at a pecan supper to be given at night. All the pessimists said nobody would answer the invitation. Did they?

Three hundred farmers and ranchmen of the county helped to fill the District Court room on the afternoon of Pecan Day, and two hundred persons sat at the tables at supper that night. The tables were decorated with miniature pecan trees on which were hung dollars and half dollars, just as a slight hint that there is money in pecans—if you treat 'em right. A "Pecan Culture" program made up the scheduled speaking part of the occasion; the following subjects being interspersed with the various courses of delectable viands:

SPEECHES, SUPPER, DEMONSTRATIONS

"Tickling the Ground to Make it Laugh"—
Preparing the Soil and Planting

D. F. Moore

"The Perfect Pecan Manicurist"—
Budding, Grafting and Top-working

W. T. Moore

"Treating 'Em Right"—
Harvesting

W. J. Millican

"This Little Pig Went to Market"—
With Pecans

A. W. Woodruff

The two Moore brothers and Mr. Millican are pecan growers of Bend, San Saba county, Texas, and Mr. Woodruff is secretary of the San Saba Pecan Company, at San Saba.

The crowning feature of the occasion was the pecan supper served by San Saba housewives. Everything served, except the iced



SAN SABA MAIDS, SAN SABA, TEXAS—AUGUST 1922

Those who had not eaten their pecan necklaces are shown wearing them.
(Left to right): Standing—Misses Lena T. Cowan, Jennie H. Morris, Inez Johnson, Mae M. Johnston.
Seated—Misses Betsey Walters, Daisy L. Taylor, (chairman) Frances Harris.

September is Pecan Month in the Sunny South

Secretary J. Lloyd Abbot of the National Nut Growers' Association has been busy in recent months. On August 9th he sent the following letter to state horticulturists of the South:

We wish to make the month of September "Pecan Month."

We feel that it would be a great help to the farmers of the South if every farm had a few pecan trees on it. Pecan trees will provide shade, excellent food, some pin money, and much satisfaction as well as helping to give the farmer a more varied diet, this being one of the great handicaps under which so many southern farmers are working. The farmers who become most interested will then attend the annual convention of the National Nut Growers' Association at Thomasville, Ga., October 3d, 4th and 5th, where papers will be read which when printed will add greatly to the pecan literature now available, and the reading of the proceedings from this convention by our farmers who cannot attend it will fix permanently in their minds the results obtained by our work during the "Pecan Month" September.

Please write us any and all suggestions you care to make in regard to "Pecan Month" and outline to us how your office can best work together in making the results amount to something in your state.

Please mail us a list of the Nurserymen in your state, and we would appreciate it greatly if you marked the Nurseries which grow pecan trees. We feel that these Nur-

tea, lemonade and sugar was produced in San Saba county, and it was served by "San Saba Maids," each of whom wore a necklace of pecans, as shown in the picture—only some of the girls had eaten their necklaces before the photographer got them posed.

The two days following, Judge Edwards gave demonstrations of budding and grafting to a large number of interested citizens, which has been the means of stimulating a lot of interest in developing improved varieties of pecans.

The menu served at the supper was as follows:

MENU

San Saba Made—Served by San Saba Maids
Fruit Cocktail—a la Pecan
Chicken—Pecan Salad—a la San Saba
Pecan Sandwiches—a la "Pecan Supreme"
San Saba Pecan Pie
a la San Saba Housewives
Iced Tea Lemonade
Smokes

Everything served contained pecans, except the tea, lemonade and cigars. To many of the guests the supper was a revelation. One of the after-dinner speakers said he never dreamed a whole meal could be made from pecans. The ladies were highly complimented.

So everybody agrees that San Saba's First Annual Pecan Day was a success from every angle.

The pecan "nuts" of San Saba calmly claim their county as "The Pecan Center of the Universe." What their claim will be when they have fifty or sixty thousand acres of pecan orchards bearing improved varieties, is almost beyond the power of imagination. Anyway, the pecan committee, and all who were present, assert that the first Annual Pecan Day was a huge success, and they advise their fellow pecan enthusiasts to "go and do likewise."

The souvenir program had a big "paper-shell" pecan attached by means of a fancy green cord.

On the program was this quotation: "The San Saba pecan is the finest-flavored pecan in the world."—J. F. Jones, Lancaster, Pa.

serymen can properly be called upon to assist in every possible way in making the results obtained as big as possible, as these Nurserymen are one class of men who will be greatly benefited by the work and results obtained.

Secretary Abbot also sent the following letter to all members of the National Nut Growers' Association:

We wish to make the month of September "Pecan Month."

We know we can count on your active co-operation and help.

Please write the Director of your Experiment Station, Director of Extension, State Horticulturist, Commissioner of Agriculture, Secretary-Manager of your State Farm Bureau, Publicity Director of Extension Service and Farm Bureau, and your County Agent, and urge them to make every possible effort to make Pecan Month a success, and suggest to them ways and means that occur to you which will help make it a success.

Mail check to this office for as many slips like the one inclosed that you can afford to buy at the following prices: One thousand \$2.50; five hundred \$1.50; two hundred and fifty \$1.00; and one hundred 50c. Then mail out these slips to friends who should become members of this Association, accompanied by a strong letter urging them to join, and emphasizing the benefits they will derive by doing so. Then continue to inclose one of these slips in all letters mailed out by you.

We are rapidly completing the program for this year's convention, and it should be by far the best convention we have ever had.

The strength of our Association is in numbers, and if every member will secure five new members during pecan month we will meet in Thomasville, Ga., with an Association that we will all be proud of.

Let's go.

P. S.—Write a strong article in your local paper especially the Sunday edition in regard to Pecan Month.

Hearty co-operation was shown in replies from all sections.

M. E. Hays of the Texas Farm Bureau Federation wrote:

"Your designating September as Pecan Month fits in very nicely with the plan of the Texas Pecan Growers, who are at this time, through their association, Extension Service, A. & M. College, and the Farm Bureau, starting a co-operative marketing movement which will be ready for operation for the season of 1923. This organization was instigated by the Texas Pecan Growers' Association, which appointed an organization committee consisting of the following: H. G. Lucas, Brownwood, Chairman; N. A. Palmer, Comanche; J. H. Burkett, Clyde; O. P. Griffin, Brownwood; A. I. Fabis, Brownwood; John U. Lee, San Angelo; W. F. Moore, Bend; Oscar Gray, Waxahachie; these working with the Texas Farm Bureau Federation and the Extension Service, A. & M. College.

"A five year contract has been prepared and submitted to the organization committee and tentatively approved, our contract system being the same as used in California; and this organization will be patterned after the nut grower's association of California.

"During the months of September and October educational work for the association will be conducted during November and December co-operative marketing speeches will be made in the pecan producing sections of Texas; during January and February campaigns for membership will be inaugurated and the sign-up completed. Incorporating and setting up of the organization will be done in April and May. During

the rest of the time until harvest we will be in position to make arrangements for marketing this valuable crop.

"I sincerely trust that in your September issue you will mention the above facts because of your circulation in this state; and I also see from your letterhead that you have one of our very good friends, Mr. E. C. Butterfield, as your second vice-president."

E. W. Cole, director of Bureau of Markets, Austin, Tex., wrote:

"We are in receipt of your circular letter of August 12th relative to pecans and the observance of Pecan Month in your State and throughout the pecan belt.

"It is needless to say that we are very much interested in any project, the purpose of which is intended to boost pecans and the pecan industry, because, aside from the general welfare of the country, Texas leads all other sections of the world in the production of native forest pecans.

"We shall be pleased to assist your program in every way we can from this office through means of our channels of publicity, though we do not believe that it will be possible to attend the National Nut Growers' Association at Thomasville, Georgia, October 3rd, 4th and 5th.

"I am inclosing herewith a copy of a paper on Standards for Pecans, that the writer prepared at the request of the Secretary of the Texas Nut Growers' Association, and which was read before a convention of nut growers at Brownwood, Texas, May 23d, and which may be of interest to the National Nut Growers' Association. You may reproduce it at the convention, if you so desire, giving full credit to the author.

"It doubtless will be of great interest to you and the Association to know that the pecan crop of Texas will be almost a complete failure this year. It is the opinion of this Department, after an extensive and complete survey of the pecan orchards of this state that there will not be more than 5 per cent of a normal crop, and possibly not more than 3 per cent. In fact there are so few pecans scattered over such a large territory that it is doubtful that more than half of the crop could be harvested, on account of the amount of labor and the time required to harvest what few might be salvaged. Texas will probably not harvest more than 15 to 20 carloads of pecans this season."

Secretary Abbot sent the following to Director of Experiment Station, Director of Extension, State Horticulturist, Secretary-Manager State Farm Bureau, Publicity Director, Commissioner of Agriculture:

"The reports coming back to this office show wonderful co-operation from all directions in making 'Pecan Month' September a great success and of lasting benefit to the farmers of the country.

"As a suggested brief of some of the work to be outlined, we submit the following: The County Agent, always co-operating with the County Farm Bureau where there is one, have each community call Community Meetings, all Community Meetings to be held on the same date, the County Agent fixing the date most convenient before September 16th. One week later the County Agent have a County Mass Meeting at which the best papers prepared and read by pecan growers at the Community

(Continued on page 36)

Nut Culture in Canada

Several replies have already been received in response to the request published in the July issue of the *American Nut Journal* for names and addresses of those having nut trees of any kind. Among these replies is one by Prof. James A. Neilson, lecturer in horticulture, Ontario Agricultural College, Guelph, Canada. Mr. Neilson sends a large package of replies received by him in answer to a questionnaire addressed during the spring of 1921 to persons in Ontario and other sections of Canada. The questions asked were:

1. Are any of the following kinds of trees growing in your locality? (Naming 12 kinds of nut trees).

2. Do you know of any individual trees of the above mentioned kinds of trees that are superior because of large size of nuts, excellent flavor of kernel, thin shell, rapid growth or high yields? Please give exact location of such trees.

Is anyone in your section making a special effort to grow any native or foreign species of nuts? If so, please give the name and address.

Prof. Neilson has done a remarkably large amount of work in conducting a survey of the nut-growing possibilities of Ontario, Canada, obtaining interesting results. Space permits of only a portion of the account. Nut trees of the native varieties are hardy and demand but little care compared with other tree crops. Prof. Neilson believes that valuable foreign varieties can be acclimatized to the southern portion of the province at least. He has been in correspondence with Japanese and Chinese authorities to procure stock.

Throughout Elgin county, Ontario, along the Lake Erie shore, 77 correspondents in various locations report presence of black walnut, butternut, hickory nut, beechnut and hazelnut almost invariably; also in some cases English walnut and chestnut.

Norman R. Stansell, Bayham, Ont., reports a fine American chestnut tree, bearing good nut, one-eighth mile west of Kinglake, Norfolk county; tree overhangs roadway. Maude L. Sweet, Sparta reports a hickory tree in Yarmouth, the nuts of which crack out kernels easily. Good size nuts; not heavy bearer. Eric Amoss, Corinth, reports in that vicinity (R. R. 1) walnut tree bearing large nuts of excellent flavor and high yield; a hickory with large nuts, thin shell, excellent flavor; another hickory with large nuts, fine flavor and of high yield. Harold Wallace, Murray Stewart and Robin Dennis of Corinth are growing seedlings. Charles M. Clarke, Aylmer, Ont., has written to Dept. Agr. for English walnut seed. On the farm of Leonard Hankinson, Malahide, Elgin county, are hickory trees several of which bear nuts much larger than the ordinary size. There is a chestnut tree bearing great numbers of nuts of large size on the farm of Willard Elgie, a walnut tree with high yield of large nuts on Joseph Leslie's place, and a hickory tree with large nuts on Gordon White's place, according to report by Mae McIver, R. R. 2, St. Thomas, Elgin Co., Ont. May Breen, RR. 7, St. Thomas, reports hickory nuts of large size (from Missouri) on E. C. Gilbert's farm 1 1/4 miles north of Payne's Mills cheese factory. Chestnut trees on the hills north of Vienna, Elgin Co., yield large nuts. Edward Watty, 75 Flora St., St. Thomas, Elgin Co., says: "On my farm at Sparta walnuts, chestnuts, butternuts and filberts grow to perfection." Selma M. Caverly, RR. 1, Staffordville, Elgin Co., reports a hickory tree bearing extra large nuts with thin shell grows on the farm of W. M. Howse, a beech tree with

extra large nuts on the farm of H. Webster, and American sweet chestnut trees on the farms of Mr. Stansell, F. Everett, Messrs. Lodge, Postage, Campbell, Osterhout, Davis and Anderson, B. W. Fleming, Wilford, and an orchard on the farm of J. B. Lambton, Ont. planted 12 Jap. walnut, 8 English walnuts, 12 chestnut, 12 hazel, 6 almond trees. The chestnut and 5 almond trees died, English walnut killed in severe winter. Dr. Sager, Brantford, makes a specialty of nut growing. W. H. Williamson, Princeton, Oxford Co., says English walnuts yield well on clay loam in yards about buildings. George Mackay, Kincardine, Ont., set out few English walnut and butternut trees last year; doing well. A. McStephens, Dresden, has 1000 walnut trees about 20 years old; many have been grafted with English walnut. May McCrie, Sarnia, Lambton Co., reports a hickory bearing large fine nuts; 100 Am. black walnut trees one of which bears very large nuts. Immense crop last year and no sale for the nuts. A hickory bearing a thin-shell nut of fine flavor is on the Willey sideroad, Dutton, Elgin Co. L. H. Weaver, R.R. 5, Dunnville, Ont., has a hickory tree of sure yield, large nut of thin shell and good flavor. W. S. Thompson and Harper Secord, St. Catharines, have been growing English and Japan walnuts, as also has David Moyle, Langstaff, Ont. George MacKay, Kincardine says: "For hickory trees by the thousand, write to caretaker of Stag Island, near Sarnia. A farmer of more than ordinary intelligence related to me that he had a pretty large grove of walnut trees which he cut down, logged into a heap and burned, and that if he had those trees now they would pay for his farm and the one adjoining."

PECAN CROP IN MEXICO

By Consul A. J. McConnico, Guadalajara, Mexico

The prospects for a large yield of pecans in the Guadalajara Consular District this season are not very favorable, according to reports from Amacucca, Jalisco, the center of the pecan-growing region. The general opinion is that the yield will be less than in 1921, but no estimates can be obtained.

The average crop, like that of 1921, amounts to approximately 350 tons and is valued at \$120,000 or more. Formerly, one-half of the crop was exported to the United States. In 1919, the quantity exported was valued at \$100,000, but since then the exports have been negligible. This is due probably to the increased local demand and to the fact that local dealers have been offering more satisfactory prices to the producers than agents of American firms.

August 7, 1922.

If it relates to nut culture it should be in the *AMERICAN NUT JOURNAL*. Please send it in.

Pecan Month, September

(Continued from page 35)

Meeting will be read, these farmers having had their papers assigned to them in advance of the Community Meeting. The County Agent himself to read a paper at the County Mass Meeting on pecan culture and varieties as best adapted to his County's conditions, and the County Agent also give the meeting a summary of the various papers read at the last National Nut Growers' Association convention, he of course preparing this summary ahead of time. The County Agent then to collect and mail in to the State Horticulturist, the papers he considers most worth while, and the State Horticulturist select one paper from his state to be printed in the same book as the proceedings of the National Nut Growers' Association. Urge all farmers who can to attend the annual convention of the National Nut Growers' Association at Thomasville, Ga., October 3-5, and where no one present has the money to go at his own expense, for the meeting to arrange to send one representative who will attend the convention and report back in regard to it at another county mass meeting held one month off.

"The Publicity Department of the Experiment Station, and the Farm Bureau to give the widest possible publicity to the work being done during 'Pecan Month' September. In addition to bringing out the great profits to be derived from growing pecans on a commercial scale, emphasize to the general farmer the fact that pecan trees provide shade, excellent food, some pin money, and much satisfaction, as well as helping to give the farmer a more varied diet than that on which he now exists, this lack of variety in his ration being one of the great handicaps under which so many American farmers are now working.

"Where circulars are mailed out, slips should be inclosed like the one I am sending you. These slips can be obtained at this office at the following prices postage prepaid: One thousand, \$2.50; five hundred, \$1.50; two hundred and fifty, \$1.00, and one hundred 50c. Urge every one to join the National Nut Growers' Association, which will give them free a copy of the annual proceedings. The reading of the papers printed in the proceedings will fix permanently in their minds the results obtained during 'Pecan Month'. Many of the single papers contained in the printed proceedings are alone worth the cost of membership. Has your library a copy of the last proceedings? It is not complete without it, as we are woefully lacking in scientific literature on pecans.

EVOLUTION IN TREE GRAFTING



Almost anybody can graft almost any kind of tree at almost any time of the year by the new Morris paraffin method. Former methods of tree grafting now out of date. Paraffin method in addition offers new advance in treatment of tree wounds in general. Use the Morris method with Merribrooke Melter.

\$5.50 postpaid east of Mississippi River.
\$5.75 western United States and Canada.

TYSON BROTHERS INCORPORATED
(DISTRIBUTORS)
FLORA DALE, PA.

THE MERRIBROOKE
MELTER

WALNUT ON PEAR SEEDLINGS

What Manager Thorpe Finds In China—Growth in Rocky Land and Torrid Sections

The development of new varieties of walnuts, suitable for planting in the hot interior valleys of California and perhaps adaptable to certain sections of Arizona and New Mexico may result from an intimate study of the walnut industry in China, made during the past summer by C. Thorpe, manager of the California Walnut Growers Association.

While visiting walnut districts in the northern provinces of China, Mr. Thorpe made the discovery that many of the finest walnut trees had been produced by budding upon native pear seedlings. After making a personal investigation of this method, Mr. Thorpe arranged with experts in agricultural schools of China to provide the Association with a quantity of buds and some native pear seeds.

It is Mr. Thorpe's belief that with this material the field department will perhaps be able to develop varieties of walnuts which will be suitable for hot inland valleys—more suitable than any of the varieties grown in this country at present.

Speaking of walnut land, Mr. Thorpe writes that in some parts of China walnut trees of immense size are grown upon rocky land. In some places the trees, he says, seem to grow right out of the rocks, and yet they are doing well and producing big crops.

In some of the Chinese walnut districts, according to his reports to the Association, the climate is hot and extremely dry—not unlike that of certain sections of New Mexico and Arizona. Even in these torrid regions of China the walnut trees are decidedly green, and the nuts are surprisingly large.

In East Alabama

Camp Hill, Ala., Sept. 17—The pecan crop will not be as good in East Alabama as last year. The nuts did not set as fully and shedding continued to the middle of August. It looks now like about 60% of a normal crop. Very little damage in any section from scab.

J. A. KERNODLE.

Effects of Scab and June Drop

Ocean Springs, Miss., Sept. 9—The prospect for the pecan crop in this vicinity has not changed very much since my last report, and probably will not be more than 20 to 25% of a full crop.

Hardly no signs of scab could be seen up to June and belief was that we would have no scab to speak of this year; but about a

month later it appeared in great quantities, and it affects so far all varieties except the Russell. This as well as the June drop will cut down the crop considerably. The younger trees have heavier crop than the older trees in comparison.

ALB. B. ACKANDER.

THE HOPE OF THE FUTURE

Up to this time, we have regarded the nut industry largely in the light of a profitable industry to the grower and a delightful food product for the consumer. We are beginning to see, says Dr. Robert T. Morris, that it is the greatest hope of the future in the way of providing a more healthful diet for a thickly populated world and that the industry may have far-reaching effects even upon the peace of the world.

Take for example Japan. According to her present "agricultural thought habit," she is overcrowded and is disturbing many parts of the world, including our Pacific States, in seeking new areas for emigration. Dr. Morris is of the opinion that with the development of her own native nuts—Japanese chestnuts, heart nuts and pine nuts—and with the introduction of our nuts, Japan can easily support a population two or three times larger than under present agricultural conditions, and that there is no need for her to be seeking new worlds to occupy until she has developed her own. Even China can not only increase and improve her food supply by the extensive planting of nut trees but she can also replenish her forests and thereby largely solve her drought and flood problems.

Effect of Irrigation on Walnuts

In 1919, one out of every eight California farms grew walnuts and the trees which were irrigated produced over 11½ per cent more per acre than the unirrigated trees, according to the University College of Agriculture. The great value of supplying irrigation water, especially in years when the rainy season is late, has been thoroughly demonstrated in tests carried on by the State College of Agriculture in co-operation with the Walnut Growers' Association.

A new correspondence course on Walnut Culture given by the College of Agriculture includes a lesson on irrigation of walnuts. A detailed description of the course may be found in Circular 113 which can be obtained on request from University of California College of Agriculture.

One of the slogans of J. J. Kelsey, proprietor of the Keso Nurseries, Clinton, Conn., is "Feed—Breed—Weed."

BUDDY NUT TREES

A new hybrid nut tree, cross between the Japanese walnut and the butternut, is the fastest grown nut tree in the world. Bears when five years old large nuts in quantities. We have several thousand of these trees in the nursery and they have all grown from 4 to 6 ft., this year. SEND FOR CATALOG.

KESO NURSERIES, Clinton, Conn.

BRAZIL NUT

James W. McGlone of New York, in his review of the Brazil nut situation early last month said:


The steamer Dunstan arrived on Wednesday bringing a cargo of about 875 tons from Manaos. These nuts are now being discharged and are of excellent quality. By this steamer I received my first importation of 400 tons large washed Manaos, which are meeting with a very good demand.

The statistical position is much stronger than generally believed, notwithstanding the crop promises to be the largest on record with a total of about 30,000 tons. Already 28,000 tons have been shipped, of which only 11,000 tons have arrived in New York, the remainder having been shipped to England. England has this year taken proportionately a larger share of the crop than ever before. Usually the crop is divided, about 60 per cent coming to the United States and 40 per cent to England and the Continent. Notwithstanding England's heavy importations this year, that country is still a buyer in the primary markets and reports having experienced an unprecedented heavy consuming demand since the beginning of the present crop; the popularity of the nut being due to its cheapness this season.

Latest cable advices from my correspondents in Para and Manaos report the crop is coming to an end, it being estimated that less than 1,500 tons are still to come forward. Should all of these come to the United States, which is not likely, it would bring the total arrivals here for the season up to about 16,000 tons, which is 2,000 tons less than were imported in 1921, practically all of which were sold before the present crop started.

The market is firm for prompt shipment at 9c to 9½c on large washed and 7c to 7½c on mediums.

Important business has been done for September shipment at 11c to 12c on large washed and 8½c to 9c on mediums; comparatively, prices for prompt shipment appear more attractive from the buyers' standpoint.



Salted Pecans in 10c Sax
80c Doz. to Stores

Want Growers' Names
and Samples.

BARRY NUT CO.
Atlanta, Ga.

Just mention AMERICAN NUT JOURNAL.

PECAN TREES

We Grow Them Right
We Pack Them Tight
We Price Them Right

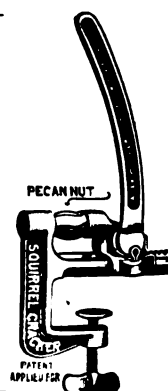
Southern Nut Tree Nurseries,
THOMASVILLE, GA.

Squirrel Nut Cracker

BEST ON EARTH

Cracks the Shell but not
the Kernel.
Adapted only for table
nuts—especially Pecans.

ALEX WOLDERT CO.
SOLE DISTRIBUTORS
TYLER, TEXAS and CHICAGO, ILL.



The Logical Market Place for Sale of Nuts

The Advertising Columns of the *American Nut Journal* Chief Exponent of the Trade.

Hundreds of Readers of this Journal Ask for Pecan Nuts in Moderate Quantity at Prices Less Than the Retail Price per Pound in Northern Markets. They Would Be Eager Buyers if They Knew Where to Apply. If There is Any Surplus at Any Time, the Advertising Columns of this

AMERICAN NUT JOURNAL

P. O. Box 124

ROCHESTER, N. Y.

Journal Will Dispose of It. Rate, \$2.80 per Inch. Announcement Should be Maintained the Year Around (Yearly Rate, less than 60 Cents per Inch a Week) to Secure Best Results. Make Your Name a Household Word Wherever Pecans Are Wanted. Make It Easy To Procure Them.

The American Nut Trade: Market and Crop Reports

THE PECAN

At Glennville, Georgia

Glennville, Ga., Sept. 7—Earlier in the season we expected to have a fair pecan crop in this section; but owing to excessive raining and hot weather just at the time the nuts were trying to mature, lots of them have been thrown off, and then also the leaf case-bearer did quite a bit of damage in the early spring. We are now expecting to get a little upwards of a half crop.

J. M. BREWTON PECAN CO.
By B. C. Brewton.

In Alabama

Spring Hill, Ala., Sept. 6—We have a comparatively small acreage of pecan trees of bearing age in this section and, unfortunately, most of our trees of bearing age were planted on soil too light for best results with the pecan. However, the trees which are planted on our better soil types and have received good attention, are bearing nice crops.

I had the pleasure, last week at Lucedale, of seeing twelve-year-old trees which were breaking down with nuts, in spite of many props. If we had a large acreage like this, we would certainly seize the opportunity to make up a large part of the Texas pecan shortage.

J. LLOYD ABBOT,
Secretary Nat'l Pecan Growers Assn.

In Florida

Monticello, Fla., Sept. 8—Pecan crop very poor. Perhaps 20 per cent.

SIMPSON NURSERY CO.

In South Carolina

Fort Mill, S. C., Sept. 5—The nut prospect in this vicinity, and in most of this state is very poor. Some of the best trees have had no nuts whatever this year. Too much rain at pollinating time, and too much dry

weather for last 30 days has seriously damaged the crop. Should say about 30 per cent of normal crop will be about right as to production.

B. M. LEE, State Vice-Prest.

In Mississippi

Theo. Bechtel, Ocean Springs, Miss., reports that summer drop of pecans has increased in some orchards; but, generally speaking, abundance of moisture has increased the size of nuts remaining on the trees enough to offset the drop. Scab is claiming a large per cent (where not sprayed) than last year.

Damage by Fall Web Worm

Reports coming in from all parts of the state and observations made by inspectors of the state plant board for the past month or two indicate that Mississippi is now having one of the worst attacks of the fall web worm in many years. Persimmons, pecans and hickory trees all over the state are being covered with the webs of this pest and in many cases the limbs have been stripped bare. Other trees are also attacked, but the injury is less serious.

As this is the first generation of the worms at work now, it is very probable that much greater damage will be done by the next brood unless large numbers are killed by parasitic insects. Studies are being made now in the state plant board laboratory to determine what percentage of the web-worms have been parasitized.

To prevent much damage from the second crop, owners of orchards and pecan groves should destroy the worms at once. The most satisfactory method is by spraying the trees with arsenical before the webs form or while they are very small, but as few are equipped for spraying tall trees, one of the best methods is to burn the webs with a rag or torch soaked in kerosene and fastened to the end of a long pole, using

care not to burn the limbs. Webs on low limbs can be removed and destroyed without burning.

S. E. Georgia Pecan Association

A non-profit co-operative organization representing thousands of acres of groves in the southeastern Georgia pecan belt affiliated with the National Pecan Growers Exchange.

Officers—Dr. W. H. Born, Pres.; Col. G. H. Harris, Vice-Pres.; J. H. Girardeau, Sec'y; E. F. McRae, Treas.

Directors—Dr. W. H. Born, Col. G. H. Harris, E. F. McRae, J. F. Cook, J. H. Girardeau.

Editor American Nut Journal:

This Association, now fully organized with the above officers, already has a growing membership representing thousands of acres of groves in this section. We will act as agent between the growers of this section and the National Pecan Growers Exchange in lieu of a branch for the present, concentrating the nuts and shipping to the Exchange in car-lots. We have representation on the board of the National so that we can look after details for all with the same effort that normally each member would have to exert. We also will act as a clearing house for pecan information and experience as it bears on this section.

J. H. GIRARDEAU, Secy.
McRae, Ga., Aug. 19, 1922.

An average crop for Texas is about 350 carloads of pecans, but probably not more than fifteen cars will be harvested in Texas this year.

J. R. Thompson, Hillsboro, Texas, has 25 pecan trees planted 25 years ago, bearing a fair crop this year.

If it relates to nut culture it should be in the AMERICAN NUT JOURNAL. Please send it in.

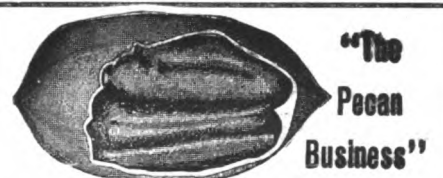
Budded and Grafted
HARDY NORTHERN NUT TREES
Best varieties, grown in natural nut soil. Send for catalog. Have your seedling nut trees topworked to these fine varieties.
Information and estimate on request.
INDIANA NUT NURSERY
Rockport. J. F. Wilkinson, Prop. Indiana

PECAN TREES

100,000 TREES—STANDARD VARIETIES
WE GROW NOTHING BUT PECAN TREES
HIGH QUALITY—SERVICE THE BEST
SIMPSON NURSERY CO., MONTICELLO, FLA

THIS SPACE
\$2.50 Per Month Under yearly Contract
Under less than yearly term:
\$2.80 Per Month

PECANS
We are the pioneer growers of budded and grafted pecans in the South. Have a complete stock of the leading standard varieties. Can furnish trees we know will please and give satisfactory results. Catalog free.
INTERSTATE NURSERIES
C. M. Griffing & Co. Props., Jacksonville, Fla.



NEW EDITION FREE
A practical guide showing how to bud pecans. Tells how to grow trees 12 inches in diameter by the end of the 8th year, which yielded 400 lbs. nuts per acre.
Trees, Nuts, Groves for sale direct without agent at attractive reduced prices
B. W. STONE, Thomasville, Ga.

THIS SPACE
\$.60 Per Week Under Yearly Contract
Including Publication in both AMERICAN NURSERYMAN and AMERICAN NURSERY TRADE BULLETIN.
One Month: \$2.80 in both.

SUCCESS

and other leading varieties. Also citrus
BECHTEL PECAN NURSERIES
Ocean Springs, Miss.

PECAN TREES

Plant them this year! Buy direct from nursery and save agent's profit. All standard varieties; quality and service the best. Write us for prices.

FLORIDA NURSERIES
W. W. Bassett, Prop., Monticello Fla.

AMERICAN NUT JOURNAL CHIEF EXPONENT OF AMERICAN NUT INDUSTRY

Of National Circulation

Covering Every Phase of Nut Culture

Subscription: - - \$2.00 Per Year
Advertising: - - \$2.80 Per Inch

Official Journal { National Nut Growers Association
Northern Nut Growers Association

AMERICAN FRUITS PUBLISHING COMPANY

39 State Street, Rochester, N. Y.

PERSIAN WALNUT

World's Walnut Crop Large

With a large production of Sorrento walnuts in sight the foreign markets, as well as domestic buyers, are slow to place business at primary points. A letter from the heart of the Sorrento section says that the market is weak with very little buying. The crop is estimated at 250,000 bags, which is larger than the 1921 yield, but quality will be fine. France's walnut crop is said to be the largest in history and three times the output of 1921 is anticipated. California also will produce a big tonnage.

With a capitalization of \$375,000, the Southwestern Nevada Walnut Growers' Association was incorporated Aug. 9th, for the purpose of growing walnuts on a large scale in Mineral county. John H. Miller, Roy Mighels and B. F. Curler are incorporators.

Under the direction of Judge G. W. Roberts, of Washington, S. D., walnut trees were planted with the double object of encouraging the planting of a tree for every deceased soldier and of beautifying the Washington Highway along which the walnut trees were planted.

Indiana's Crop Report

Rockport, Ind., Aug. 23—The present outlook is for a good crop of pecans and black walnuts. The hickory crop will not be over 50%.

J. F. WILKINSON.

MEMBERSHIP DRIVE

National Nut Growers Association

\$2.00 Per Year—Limited Offer

By direction of the Executive Committee of the Association the Membership Fee has been reduced to \$2.00 for the limited period of the present Membership Drive.

REGULAR YEARLY RATES

Association Membership.....\$4.00
American Nut Journal..... 2.00

SPECIAL YEARLY RATES

Association Membership } \$3.25
American Nut Journal }

Address J. Lloyd Abbot, Sec'y.
Route 1, Spring Hill, Ala.

Just mention AMERICAN NUT JOURNAL.

Deaf Mutes May Grow Pecans

W. T. Evers, Denton, Tex., long a reader of the Journal, sends the following clipping from a Denton newspaper of recent date:

Denton mutes were hosts to a number of mutes from other towns and several other visitors at a picnic given by Mr. and Mrs. Hosea Hooper at the Dr. J. L. Hooper farm east of the city Sunday, assisting in the entertainment being Mr. and Mrs. H. L. Gough, Mr. and Mrs. W. R. Morton, Mr. and Mrs. John Allbert, Misses Beulah Christal, Minnie Turner and Edna Acuff and H. B. Stanley. One of the features of the entertainment was an inspection trip over the W. T. Evers pecan orchard nearby, which A. G. Gunner of Chicago, one of the visitors, pronounced one of the largest in the state.

One of the business features of the entertainment was a discussion of the mutes' meeting to be held at Dallas on October 14 to organize "The Silent Country Club of Texas," the ultimate purpose of which is to build a home for aged and decrepit mutes of the state. The club will be incorporated for \$25,000 and will be located at Denton, upon a large tract of land two and one-half miles east of the city at Denton.

Mr. Evers writes: "There were about fifty of these people in their party, and the majority of them, including men and women, walked for two or three hours with me, seeing how I had my trees planted, how we cultivated them. It was very interesting to see how they observed things, and they seemed very much impressed at seeing nuts on some trees about four or five feet tall.

"In case they decide to locate in Denton, I have promised to furnish them some budwood, and to give them the benefit of my limited experience in growing pecan trees. This seems to be a very worthy enterprise, and should furnish honest, profitable employment for a lot of good people who are not so fortunate in some ways as the most of us."

Bumper Chestnut Crop

Uniontown, Pa., Aug. 1—Reports from mountain sections of Fayette county indicate a bumper chestnut crop this season. Not in years have prospects been so good, according to reports received here.

W. J. Allenger, of Baconton, has accepted a position as superintendent of 700 acre plantation for the Pecan Plantations Co. He has had fifteen years experience in managing pecan groves and Nurseries, for a number of years being manager of the Barnwell Groves, near Baconton.

The Houston, Tex., Nut and Products Co. has been established to handle all kinds of edible nuts.

THE ALMOND

Excellent Malaga Crop Promised

Jordan and Valencia almonds from Malaga, Spain, will be plentiful this year, according to trade reports just received from Consul Smith at the Department of Commerce, Washington. It is estimated that the present production will be greater than the last year's by from 25 per cent to 50 per cent, and the maturity about a week or two earlier. The grade or quality will be on a par with last year's crop with possibly a slight per cent more of the large sized nuts.

Prices will probably be somewhat less than those of last year but it is yet too early to predict—much will depend upon the production of other Mediterranean countries and other factors. Some 1,701,181 lbs. of Jordans and 2,583,357 lbs. of Valencias were exported to the United States last year and a total of 896,657 lbs. from January 1 to June 30, 1922.

THE BEECH

The American Beech

Among native American trees is one which should have greater recognition in its usage as a beautiful shade and ornamental tree. It is highly valued as a park and landscape tree because of its beautiful foliage and striking color of the bark. It is also a very valuable forest tree in the lumber industry.

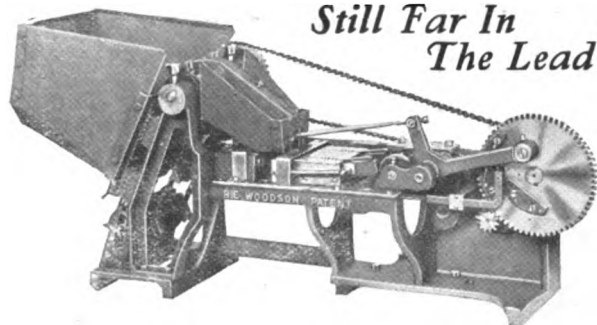
The tree is tall and symmetrical with round head and drooping branches. The bark is smooth and a very light gray in color. All year round the beech is of excellent landscape value. In the spring the young tender foliage is a delicate silky green tinted with pink and rose, reminding one of beautiful flowers. The flowers of the tree are themselves attractive in graceful drooping heads.

In the summer the foliage and bark of the tree gives it a striking appearance especially when grown in clumps with other trees. The leaves are very thin and shiny and make a beautiful contrast. On the home grounds a closely planted clump of beeches will hold much interest to the landscape plantations. Then, too, the edible nuts will make them still more interesting to the home folks.

So far as is known the beech has no insect enemies or diseases of any kind and for that reason more home owners should be interested in placing them in their plantations.—Peoria Star.

The Woodson Pecan Cracking and Grading Machines

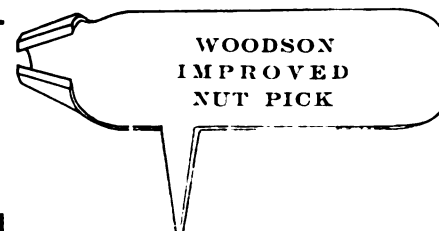
Still Far In
The Lead



I have several machines of other makes such as the "Dick B. Williams," and "Eaton," which I have taken in as part payment on WOODSON Machines. These I will sell much below their cost price.

Write for list and further particulars.

Look for the announcement of the WOODSON Power Black Walnut cracking machine.



Placing your order for later shipment will prevent you from being disappointed in delivery this Fall.

Robert E. Woodson, Inventor and Manufacturer

Office and Factory—3763 FOREST PARK BOULEVARD, ST. LOUIS MISSOURI

American Fruits Company's Library Opportunities

PRACTICAL BOOKS ON HORTICULTURE, NUT GROWING, NURSERY PRACTICE

Any of the following books will be sent on receipt of price by AMERICAN FRUITS PUB'G CO.,
122-125 Ellwanger & Barry Bldg., ROCHESTER, N. Y. Prices subject to change.

American Apple Orchard By F. A. Waugh.....	\$1.90	Insect Book—Dr. L. O. Howard...	6.30	Parsons on the Rose—Parsons.....	1.75
American Fruit Culturist By John J. Thomas.....	2.65	Insects and Insecticides—Weed....	2.15	Peach Culture—J. A. Fulton.....	1.65
American Fruit Farm—F. N. Thorpe	2.65	Insect Pests of Farm, Orchard and Garden—Sanderson and Peairs..	4.65	Peach Growing—By H. P. Gould...	2.65
American Grape Culture—Munson..	2.65	Irrigation Farming—L. M. Wilcox.	2.40	Pear Culture for Profit—Quinn....	1.35
American Grape Growing and Wine Making—George Husmann	2.15	Irrigation for the Orchard—Stewart	1.75	Picturesque Gardens—Henderson..	2.25
American Horticultural Manual By Budd-Hansen, two vols.....	3.15	Land Drainage—Joseph H. Jeffrey	2.15	Plant Breeding—By Dr. L. H. Bailey	3.40
American Peach Orchard—Waugh.	1.90	Landscape Gardening—Art of Land- scape Architecture—Parsons....	3.65	Plant Propagation: Greenhouse and Nursery Practice—M. G. Kains	2.40
Bulbs and Tuberous-Rooted Plants.	2.15	Landscape Gardening—Downing's Famous Work—10th Edition —Revised by Waugh.....	6.00	Plant Physiology—B. M. Duggar...	3.00
Bush Fruits—By F. W. Card.....	3.15	Landscape Gardening—House and Garden's Book of Gardens, 9 1/2 x 12 1/2, 400 Illustrations.....	5.15	Practical Forestry—A. S. Fuller...	2.15
California Fruits and How to Grow Them—M. J. Wickson, A. M....	4.15	Landscape Gardening—Kemp— Revised by F. A. Waugh.....	2.15	Practical Fruit Grower—Maynard..	1.00
Citrus Fruits—J. E. Colt.....	3.40	Landscape Gardening—Maynard....	2.65	Principles of Agriculture—Bailey..	2.00
Commercial Apple Industry of North America	3.65	Landscape Gardening—The Small Place—By Elsa Rehmann.....	3.65	Productive Orchard—F. C. Sears	2.65
Cyclopedia of Agriculture By E. V. Wilcox-C. B. Smith...	3.75	Landscape Gardening—Cridland....	2.65	Principles of Fruit Growing—Bailey	2.65
Dwarf Fruit Trees—Waugh.....	1.00	Landscape Gardening—The Com- plete Garden—Albert D. Taylor.	6.15	Principles of Pruning—Kains	2.65
Farm Bureau Movement—O. M. Kile	2.15	Landscape Gardening—O. C. Si- monds	6.15	Pruning Manual—By L. H. Bailey.	2.65
Fertilizers and Crops By Dr. L. L. Van Slyke.....	3.40	Manual American Grape Growing —Hedrick	3.40	Putnam's Garden Hand Book.....	2.00
Fertilizers—Edward B. Voorhees...	2.65	Making Horticulture Pay—Kains...	1.90	Quince Culture—W. W. Meech....	1.35
Field Notes on Apple Culture By Dr. L. H. Bailey.....	.90	Manual of Fruit Diseases L. R. Hessler, H. H. Whetzel..	3.15	Roses—How To Grow—Robert Pyle	1.35
First Principles of Soil Fertility By Alfred Vivian.....	1.50	Manual of Fruit Insects M. V. Slingerland, C. R. Crosby	3.90	Rose—H. B. Ellwanger.....	1.40
Forcing Book—By Dr. L. H. Bailey...	2.15	Manual of Gardening—L. H. Bailey	3.40	Sales Promotion By Mail.....	2.15
Fruit Growing in Arid Regions....	2.75	Manual of Tree Diseases—Rankin.	3.40	Small Fruit Culturist—A. S. Fuller.	1.75
Fruit Garden—P. Barry.....	2.15	Manual of Vegetable Garden Insects By Crosby & Leonard.....	2.90	Soils—E. W. Hilgard.....	4.25
Fruit Harvesting, Marketing—Waugh	1.90	Manures and Fertilizers—Wheeler.	2.65	Soils—Lyon-Fippin-Buckman	3.40
Fruit Insects—Crosby.....	3.90	Modern Fruit Marketing—Brown...	1.90	Soils—F. H. King.....	2.40
Fumigation Methods	1.90	Modern Propagation Tree Fruits— B. S. Brown.....	1.65	Soils—By Charles W. Burkett.....	1.90
Gardening for Pleasure—Henderson	2.15	Nature's Garden—Neltje Blanchan	6.30	Spraying Crops—C. M. Weed.....	1.00
Gardening for Profit—Henderson...	2.15	Nursery Manual—Dr. L. H. Bailey.	2.65	Standard Cyclopedia of Horticulture	
Grape Growers Guide—Chorlton...	1.65	Natural Style Landscaping—Waugh	2.65	Edited by L. H. Bailey. In six volumes. 3,600 pages. 4,000 text engravings. 96 sepia half- tones. 500 collaborators. May be had on installment payments	40 00
Grape Culturist—A. S. Fuller.....	2.15	Manual Tropical and Sub-tropical Fruits—Popenoe	3.90	Strawberry in North America—S. W. Fletcher	1.90
Greenhouse Construction—Taft ...	2.40	Nut Culturist—Andrew S. Fuller...	2.15	Strawberry Growing—S. W. Fletcher	2.40
Greenhouse Management—Taft.....	2.40	Nut Growing: Latest Information; Guide to Propagating—By Robert T. Morris	2.65	Success in the Suburbs—John R. McMahon	2.15
Hedges, Windbreaks, Shelters.....	1.00	Ornamental Gardening—E. A. Long	2.15	Successful Fruit Culture By Samuel T. Maynard.....	1.75
How To Grow Roses—Robert Pyle.	1.35	Principles of Floriculture.....	3.40	Surgeon's Philosophy—Dr. R. T. Morris	3.15
Injurious Insects—F. L. Washburn	2.65			Systematic Pomology—Waugh.....	1.90
Insects of Economic Importance— Herrick	2.15			Ten Acres Enough—I. P. Roberts..	1.75

A paper which gives the best value for the money to the reader will give the best value to the advertiser as well. I don't think there is any argument about the soundness of this view.—H. Dument, Chicago, Ill., in Printer's Ink.

WANTED Names and Addresses of Owners of Groves of Native Nut Trees in Northern States.

In the interest of Northern Nut Culture this Journal desires the above information to serve as a basis for extension of Nut Culture.

Readers will confer a favor by sending us lists of names and addresses of those who have stands of nut trees on their property, (with some account of productivity if practicable). Black walnut, English walnut, butternut, hickory, chestnut, filbert, etc.

American Nut Journal P.O. Box 1 2 4 Rochester, N. Y.

BUDDED and GRAFTED Nut Trees

Start right with my hardy Pennsylvania grown trees and be assured of success.

Attractive Catalogue Free.

I have this season a fine lot of stake trained Pecan, English Walnut, Black Walnut and Persimmon trees budded on root pruned transplanted stocks, that will please you and that will transplant easily and safely. Write for catalogue.

J. F. JONES, The Nut Specialist

LANCASTER, PA.

THIS SPACE
\$2.50 Per Month Under Yearly Contract
Under less than yearly term:
\$2.80 Per Month

GRAFTED PECAN TREES
ALSO BUDDED ROSES and SATSUMAS
We Solicit Your Inquiries
Carol Plantation Nurseries,
THEODORE, ALA.

WANTED
BACK NUMBERS OF THE
AMERICAN NUT JOURNAL
Will pay 50c each for a copy of numbers
2, 3 and 4 of Volume 1.
Address X, care this journal.

CONSULTING TROPICAL HORTICULTURIST and TREE EXPERT

HARVEY C. STILES

COLUMBIA, TEXAS

Specializing in Pecans, Grapefruit, Avocados, and Landscape Development. Long experienced expert for—and present active director of—many such large projects throughout tropics and semi-tropics. Examinations, Reports, Plans, Specifications and Estimates. Correspondence suggested.

Have You Nuts to Sell?

HICKORY NUTS BLACK WALNUTS
BUTTERNUTS CHESTNUTS

Hundreds of buyers are asking where the nuts can be obtained in quantity. Place your Sale Advertisement in the AMERICAN NUT JOURNAL for quick returns. \$2.80 per inch.

39 State St., Rochester, N. Y.

American Nut Journal

**DEVOTED TO NUT GROWING INTERESTS
GENERALLY THROUGHOUT THE AMERICAS**

Vol. XVII, No. 4

OCTOBER, 1922

Per Copy 20c.

A MODEL PECAN NURSERY



PECAN TREES IN NURSERY OF SIMPSON NURSERY COMPANY
Monticello, Florida. One year from bud with $2\frac{1}{2}$ year roots. Note the
thrifty growth, clean stock, straight stake-trained trees. Largest
exclusively pecan Nursery. Established 1902.

39 STATE ST.



ROCHESTER, N. Y.

American Fruits Publishing Co.

CALIFORNIA WALNUT GROWERS ASSOCIATION

Carlyle Thorpe, Manager

A California Walnut Survey

Only five walnut groves out of 141 chosen at random, located in various sections of Orange County, which is the world's greatest walnut producing center, have the trees set as wide apart as they should be. This startling bit of information came to light when the California Walnut Growers Association announced the result of a survey which it conducted in Orange County last summer in co-operation with Farm Adviser Wahlberg.

Horticultural experts long ago arrived at the conclusion that walnut trees, to produce the most satisfactory results, should be set not closer than 60 feet apart. The wisdom of such a policy was recently proved by C. C. Teague, president of the California Walnut Growers Association, who announced that after taking out every other tree on his famous Limoneira Ranch he got heavier tonnage and better walnuts.

CROWDED WALNUT GROVES

In the opinion of Mr. Teague, most of the walnut groves in Southern California are crowded, and his conclusion is borne out by the result of the recent survey. He says that half the trees in many groves could be taken out with ultimate profit to the owner. The fact that the groves in Orange County, one of the best horticultural sections in the state, are badly cramped for room is conclusive proof that Mr. Teague speaks with authority.

The Association in its survey assembled data concerning 141 walnut groves located in various sections of Orange County, representing 1,665.41 acres. These included 1616 bearing and 49 non-bearing acres. 5 groves were set 60 x 60 feet, which is the proper distance; 69 were set 40 x 40; 20 were set 50 x 50; 9 were set 48 x 48; 11 were set 45 x 45; 7 were set 42 x 42; and the others, in single instances ranged all the way from 40 x 45 and 38 x 38 down to 30 x 30 and 24 x 24 feet apart.

W. T. Webber, sales manager of the Association, says that where walnut trees stand closer than 60 x 60 feet in the rows they do not get the necessary amount of sunshine and circulation of air. Association officials are agreed that if crowded groves are properly thinned, the net result for a year or two may be somewhat smaller than formerly, but the ultimate result will be greater in tonnage as well as in size and quality.

GROVE STATISTICS

During its recent survey the Association inspected 1309 groves in Orange County. These are owned by 1239 persons. The average acreage per ranch is 12.42 acres. That Orange County ranks high in irrigation is

C. A. Reed, U. S. Nut Culturist, Held Up In China By Mutineers at Point of a Sabre

From Peking Daily News, August 25, 1922

As a sequel of the recent mutiny and looting at Peliuan two foreigners, Mr. C. A. Reed, who is studying agricultural conditions in China on behalf of the United States Department of Agriculture, and Prof. W. E. Chamberlain of the Peking University, had an unpleasant encounter with the mutineers last Saturday at Changchuang, west of Mentoukou, which promised for a time to prove serious. Fortunately they succeeded, through an interpreter, in explaining their presence to the mutineers and prevailing on them not to molest them.

Mr. Reed and Professor Chamberlain left Huailai on August 15th for a visit to the Trappist Monastery at Yungaring, and arriving there on Thursday afternoon spent the night at the Monastery. On the following afternoon they left for Mentoukou with pack and riding animals provided by the monks and crossing the Great Wall arrived at Hsiaolungmen where they camped for the night. In the course of the afternoon they had learned that the villages ahead of them were in the hands of four hundred of the Peliuan mutineers, but decided against turning back and made an early start next morning. After an hour's ride they were informed by some peasants that the town they were then approaching was in the hands of the mutineers, and on arriving outside its wall found a sentry on duty. This man drew his sabre on seeing the party approach, but when treated to a casual greeting appeared nonplussed and made no attempt to interfere.

At the next town another sentry was on duty and Mr. Reed asked his way of him but on following the road pointed out was warned by the Chinese members of the party that it was the wrong one. He turned

his pony and proceeded along the other road, followed by the others but had not gone more than a few hundred yards when a shot was fired from the village. Several other shots followed, and the party halted to await developments.

Within a few minutes they were overtaken by some eight or ten unkempt looking soldiers led by a man, obviously of a superior type, who wore civilian clothing. These crowded round them and proceeded to ply them with questions, which were answered by the interpreter. One of the soldiers apparently burned to possess Mr. Reed's field-glasses and finding his own demands ignored called the attention of his leader to them. The latter, though his attitude had greatly modified after cards and an American flag had been produced, shared his subordinate's interest in the field-glasses and requested that they be handed over. A brief inspection, in the course of which he made no attempt to focus the instruments, apparently satisfied him, and they were returned to their owner.

Shortly afterward the party were allowed to proceed after being informed that there were more of the mutineers in the valley ahead and instructed to say that they had the permission of the man in civilian clothes—referred to as "the general"—to continue their journey. No further trouble was encountered on the journey, but that evening, as mute evidence of the treatment of those who were unhappy enough to displease them, the party found a newly sealed coffin beside the road. A spot of ground near it was stained with blood, and on inquiry it was learned that the body within was that of one of three men who had been brought thither from a neighboring village and shot in cold blood.

indicated by the fact that 1285 groves, or 98.1 per cent of the total, are under irrigation, 24 being without irrigation facilities. The production of these groves in 1921 was 16,746,346 pounds, which shows an average of 1154.45 pounds per acre. The bearing walnut acreage of Orange County is 14,506.10. The non-bearing acreage, embracing trees under seven years of age, is 888.50 making a total acreage of 15,394.60 for the county.

The Santa Barbara Soft Shell variety leads in production. It makes up 56.67 per cent of the total acreage, which is 8,724.63. The Placentia variety comes next with 40.55 per cent, the acreage being 6,246.94. The Eureka acreage amounts to 2.36 per cent, the Prolific shows .11 per cent, the Ehrhardt shows .12 per cent, Hardshells show .08 per cent, and Chase shows .07 per cent, with Klondykes credited with .04 per cent of the acreage.

USE OF TRACTORS

According to the survey, 408 growers, or 33 per cent, use tractors exclusively, while 43 per cent use horses exclusively. It appears that 13 per cent use both horses and tractors, 4.4 per cent hire all their work

done; and 28.7 per cent keep cost accounting records.

The survey just completed is, according to Association officials, the most valuable compilation of information on the walnut industry which has ever been assembled. It was secured with the assistance of the Orange County farm adviser.

Similar surveys will be undertaken in Los Angeles, Ventura, and Santa Barbara Counties early next spring, the Association says. It is hoped that these three counties can be fully covered during 1923. The complete result of the survey by counties, and the final report, will be available to the U. S. Department of Agriculture, the State Department of Agriculture, all county horticultural commissioners and farm advisers, and any other organizations having a general interest in the walnut industry of this state.

A. V. Wall, Baltimore, Md., is interested in the growing of Ridenhauer or other almonds.

Dispose of your PECANS to the best advantage.
Get in touch with responsible dealers before selling.

We buy seedlings
and fancy stock.



Small shipments
or carloads.

Write or wire for our cash prices.

R. E. FUNSTEN COMPANY, ST. LOUIS, MO.

A NEW BOOK! NUT GROWING By Robert T. Morris

The latest and only up to date book on the newest and one of the most important branches of Horticulture, giving a broad survey of a rapidly growing industry. Detailed explanation of successful methods of propagation and the new process of grafting with the use of paraffin; illustrated.

An invaluable work for all nut growers.

Price. \$2.65, Postpaid

AMERICAN FRUITS PUB'G. COMPANY
39 State Street, Rochester, N. Y.

AMERICAN NUT JOURNAL --- OCTOBER, 1922

EDITORIAL DEPARTMENT—Communications on any subject connected with Nut Growing and Distribution are cordially invited by the editor; also articles on this subject. We shall be pleased to reproduce photographs of trees of interest, methods and scenes connected with the Nut Industry; portraits of individuals, etc. Suggestions are cordially welcomed.

ADVERTISING—Advertising forms close on the 10th of each month. If proofs are wanted, copy should be in hand on the 1st.

Advertising rate: 20 cents per agate line; \$2.80 per column inch for any amount of space.

Advertisements that do not represent reliable concerns will not be accepted.

SUBSCRIPTIONS—The "American Nut Journal" will be sent to any address in the United States for \$2.00 a year; to Canada or abroad for \$2.50 a year. Three years: In United States, \$5.00; Canada, \$6.50.

Add ten cents for exchange unless bank draft, express or postal money order is used.

WHAT THIS JOURNAL STANDS FOR—Reliable information on all phases of the Nut Industry. It is for the advancement of Nut Growing in general; it is in no way confined to the interest of a particular kind of nuts, nor of a particular section. It is broad in scope and absolutely independent. The aim of "The American Nut Journal" is to stimulate thousands of persons into developing interest in one of the greatest food supplies of the future—to line the roadsides and fill the waste places with trees of a sort which yield dollars worth of fruit every year instead of the mere bunches of leaves resulting from present shade and ornamental planting. At the same time it will record the progress of the industry, the latest descriptions in the note book of the biologist and plant physiologist, the rapidly expanding knowledge of methods, the increasing acreage, and in short the news as it develops of an industry whose importance is recognized by an increasing number of persons in all sections.

Entered as second-class mail matter June 6, 1914, at the post office at Rochester, N. Y., under the Act of March 3, 1879.

AMERICAN FRUITS PUBLISHING COMPANY, Inc.

Ralph T. Olcott, Editor and Manager

121-123-125 Ellwanger & Barry Bldg., Rochester, N. Y.

Classified Business Announcements In This Issue.

Alexander Woldert Co.....	"Squirrel" Nut Cracker.....	53	"Nut Growing"	New Book	42
Bassett, W. W.	Pecan Trees	54	Nut Information	Special Topics	43
Bechtel's Pecan Nurseries...	Grafted Pecan Trees.....	54	Nuts as Staple Food.....	Dr. J. H. Kellogg.....	43
Carol Plantation Nurseries...	Grafted Pecan Trees.....	56	"Nut Trees for the North".....	Expert Advice	43
Corrugated Paper Products	Pecan Shipping Cases.....		Shannon, A. H.	Pecan Groves for Sale.....	53
Florida Nurseries	Pecan Trees	42	Simpson Nursery Co.....	High Grade Pecan Trees.....	54
Funsten Company, R. E....	Pecans, All Kinds, Wanted.....	42	Southern Nut Tree Nurseries	Pecan Trees	53
Griffing & Company, C. M....	Pecan Trees	54	Southland Pecan Co.....	Special Announcement	51
Indiana Nut Nursery.....	Northern Pecan Trees.....	54	Stiles, Harvey C.....	Tree Expert	56
Indiana Nut Nursery.....	Northern Pecan Nuts,—Hickory...	53	Stone, B. W.	Pecan Trees, Nuts, Groves...	54
Inter-State Nurseries	Pioneer Pecan Growers.....	54	Texas Pecan Nursery	Budded Pecan Trees.....	47
Jones, J. F.	Grafted Pecan Trees.....	56	Tyson Brothers	Merribrooke Melter	52
Keso Nurseries	"Buddy Nut Trees"—Hybrid.....	52	Wanted	Names of Grove Owners.....	56
Lancaster Nut Nurseries....	Northern Nut Trees.....	56	Wilkinson, J. F.	Grafted Pecan Trees.....	54
Logical Market Place.....	For Selling Nuts.....	53	Woodson, Robert E.....	Pecan Cracking and Grading Ma-	55
Northern Nuts	Sources Wanted.....	56		chines	

IMPORTS OF NUTS INTO THE UNITED STATES, FOR CONSUMPTION, DURING THE LAST THIRTEEN YEARS
(Compiled by Bureau of Commerce and Navigation, Department of Commerce, Especially for the "American Nut Journal.")

KIND	1909	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919	1920	1921
Almonds—not shelled.....lbs.	2,120,632	6,810,056	3,782,654	5,242,563	2,363,860	5,501,059	4,684,598	2,368,369	4,901,168	6,149,374	7,482,538	6,460,732	5,068,215
Shelled	8,538,054	10,495,750	12,160,635	11,692,988	12,655,057	13,896,621	12,168,153	13,210,668	19,160,258	21,444,757	28,007,908	18,769,628	21,572,634
Apricots and peach kernels lbs.		27,854	13,551	7,939	18,769	18,572	67,161	11,926	250,075			65,175	32,688
Coconuts in the shell.....Dollars	\$1,246,463	\$1,298,970	\$1,704,262	\$2,012,203	\$1,793,713	\$2,150,500	\$1,593,666	\$1,891,328	\$2,584,560	\$2,490,368	\$4,063,282	\$4,230,221	\$2,283,660
Coconut Meat broken or Copra not shredded, desiccated or prepared.....lbs.	23,742,518	20,830,539	38,081,984	61,505,787	34,283,592	44,459,158	88,090,382	108,507,765	247,043,127	430,649,332	258,637,781	215,188,461	189,320,950
Desiccated, shredded, cut or similarly prepared.....lbs.	5,461,602	5,985,308	6,961,850	5,396,465	6,826,095	9,307,924	5,866,806	7,947,380	10,491,796	20,269,909	29,637,674	30,631,022	35,633,497
Cream and Brazil.....bu.	409,644	461,496	277,679	21,601,008	11,943,139	11,431,531	21,483,319	21,489,217	16,123,023	11,282,088	44,076,338	13,035,436	37,102,046
Filberts—not shelled.....lbs.	7,365,837	10,026,961	10,084,987	8,375,890	8,596,278	10,365,072	10,922,248	10,003,552	16,468,547	7,432,524	16,747,349	14,865,364	14,082,336
Shelled	1,384,689	1,413,391	2,332,606	1,368,835	1,450,620	1,798,147	1,722,705	1,259,540	2,280,757	4,245,863	3,778,906	4,711,283	4,235,107
Marrons, crude.....lbs.		10,270,398	9,968,879	14,845,445	10,157,321	18,849,257	12,549,959	15,754,796	6,275,030		5,021,146	29,484,637	23,340,988
Olive nuts, ground.....Dollars	\$580	\$478	\$236	\$206	\$342	\$385	\$23	\$112	\$420			\$132	\$189
Palm and Palm Nut Kernels ..	\$2,752	\$6,907	\$5,744	\$7,970	\$4,872	23,127	31,900	11,104,885	16,264,435	16,905,313	15,610,056	18,329,034	230,194
Peanuts or Ground Beans													
Unshelled.....lbs.	7,326,371	11,297,172	11,035,823	12,660,433	12,140,612	17,298,778	14,075,387	9,623,411	7,710,082	1,970,797	5,667,354	7,222,486	4,803,677
Shelled	1,302,919	16,089,919	7,821,505	3,127,829	7,823,173	21,819,101	11,685,507	19,739,889	27,348,928	67,746,831	24,179,687	103,552,486	39,406,853
Pecans.....lbs.	1,480,249	3,319,460	2,333,037	2,607,227	1,803,434	2,621,161	2,032,539	1,265,882	4,076,353			2,194,620	1,082,390
Walnuts—not shelled.....lbs.	17,432,885	23,269,974	21,146,116	22,208,845	16,363,046	16,134,211	20,984,326	22,610,418	17,177,992	3,304,003	21,235,078	17,339,096	31,821,639
Shelled	8,781,908	10,960,988	11,244,054	10,713,286	10,083,622	11,636,053	10,552,936	13,445,790	12,257,593	9,707,401		13,972,917	18,264,089
All other shelled or unshelled, not specially listed.....lbs.	9,938,337	3,584,544	2,962,663	3,050,989	3,600,056	7,426,313	3,272,492	2,772,589	2,761,634			3,763,973	3,880,676
Total of nuts imported Dollars	\$8,549,997	\$12,775,196	\$14,265,572	\$15,626,485	\$13,508,307	\$19,115,713	\$16,865,244	\$10,594,431	\$33,697,688	\$49,930,283	\$17,199,009	\$68,752,801	\$37,378,572

a—pounds.

Nut Culture Information

Reprint folders on topics discussed in American Nut Journal. 10 Cents Each

Grafting and Budding the Walnut—U. S. Dept. Agriculture.
Pecan Areas of the United States—W. P. Reed.
Walnut Trees For New England—Dr. Robert T. Morris.
Some Walnut Varieties—Dr. L. D. Batchelor.
Chip Buds For Nut Trees—Charles L. Edwards.
Grafting, Budding, Topworking—Dr. W. C. Deming.
Breeding Chestnuts for Disease Control—U. S. Dept. Agr.
Advent of Nuts as Staple Food—Dr. J. H. Kellogg.
Underworking Nut Trees—Charles L. Edwards.
The Ubiquitous Black Walnut—T. P. Littlepage.
Average Yield of Pecan Orchard in S. W. Georgia.
Value of Nuts As Food—Dr. W. C. Deming.
Improved Black Walnut a Good Investment—Henry Stabler.
Status of Pecan Industry—C. A. Reed, U. S. Nut Culturist.
Sources of Supply of Hazel Nuts—Bulletin Imperial Institute.
Top-Grafting the Walnut Tree—Ferd Groner.
Black Walnut As a Meat Producer—Henry Stabler.

Outline of Northern Nut Culture Activity—Dr. W. C. Deming.
Establishing the Filbert Grove—George Dorris.
Top-Working Northern Pecan Trees—J. F. Wilkinson.
Nut Trees for Highways and Public Places—W. S. Linton.
American Nut Culture—24-page Pamphlet Survey.
East Texans Reap Fortunes on Pecans.
Hazel Blight—Dr. Robert T. Morris.
American Nut Industry—C. A. Reed, Nut Culturist.
What Nuts to Plant in Northern States.
Pecan Rosette; Practical Treatment—W. A. Weaver.
English Walnut: Where To Plant It.
Nut Tree Grafting by an Easy Method—Dr. Robert T. Morris.
Purchase of Chestnut Tree With Reference to Blight—G. F. Gravatt.
Quick Results in Pollenizing Pecans—E. E. Risten.
Nut Trees to Reduce Food Costs—Chas. Lathrop Pack.
How To Guard Against Faulty Nuts—Harvey C. Stiles.
The Romance of the Pinon Nut Industry in New Mexico
Soil Fertility; Fertilizer Problems in Pecan Culture—J. J. Skinner, U. S. Department Agriculture.
The Future of the American Grown Filbert—Richard H. Turk.

AMERICAN FRUITS PUBLISHING CO., 39 State Street, Rochester, N. Y.

NATIONAL PECAN GROWERS ASS'N IN ANNUAL SESSION

Twenty-first Convention in Thomasville, Georgia—Papers and Discussions of a High Order Occupy Three Days' Meeting—Practically Every Phase of the Industry Touched Upon—Vigorous Fight Against Insects and Diseases—Planning for Big Crop Next Year—All Officers Re-elected—Jacksonville in 1923.

The National Nut Growers' Association attained its majority—that is to say, its 21st birthday—under most favorable circumstances, on October 3-5 at Thomasville, Ga. Attendance was representative, and a full program of practical topics was presented with interest and despatch under the capable direction of President Charles A. Simpson, whose record as a presiding officer is noteworthy.

An invocation was pronounced by Dr. W. M. Harris, Thomasville, pastor of the First Baptist church. Mayor H. J. McIntyre welcomed the members. The response was by Ralph T. Olcott, editor American Nut Journal, Rochester, N. Y.

President Simpson delivered the following address:

PRESIDENT'S ADDRESS

This is the twenty-first annual meeting of the National Nut Growers' Association. Those who know state there are very few of the charter members that are living and with us today. We have many new members and much dynamic energy in our association now, and we have made great progress in recent years. Those who are interested in the growing of pecans can get more real information on the pecan industry by attending one of our meetings than he can by years of experience, working alone. Why then have we not a membership of 4,000 to 5,000? Is it the fault of our association, or the fault of those who are not members? I believe it is mainly due to the lack of proper publicity.

ONE OF THE MAIN CASH CROPS

There is unquestionably an increasing interest in the pecan industry, as is evidenced by the large annual sale of Nursery stock. Some ten years ago this planting was largely made by promotion companies. Such companies who planted proper varieties on good land and gave the trees proper care are now paying good dividends, and have proved to the world by their large production of pecans that there is in reality a pecan industry. They have also proved to the farmer that he can make more money by having a good pecan orchard, and many a farmer has planted pecan trees for his prosperity and for the prosperity of his children and his children's children. Who will say that a well-cared-for pecan orchard will not still be bearing a full commercial crop one hundred years from the time of planting? I believe the time will soon come when the pecan will be one of the main cash crops of the South.

With the large number of pecan trees planted every year, the production of pecan nuts will naturally increase from year to year, and increase much faster with each succeeding year. What are we, collectively or individually, doing at this time to make arrangements to market this ever increasing crop in an orderly manner, and to uniformly grade and pack the pecans so the producer will receive a fair price for his labor?

A BROAD SELLING ORGANIZATION

It is true there is now a non-profit selling

organization for grading, packing and selling pecans for its members, and did sell some 500,000 pounds last year. But, are you a member of this selling organization—is your corporation a member? This selling organization can never prevent the pecan industry from being demoralized from time to time, until you, Mr. Grower, and the corporations growing pecans to which you belong, will also become members. Any selling organization that will stabilize the pecan industry must have a membership that represents 60% to 70% of the total production.

Some say they will join later, but cannot afford to just now, because they can sell their pecans at a price that saves the commission charged. They are too shortsighted to see that it is the organization that makes that possible, and without it prices would be far below what they are today. Some say they will not join because Mr. So & So is a member, or is a director, or is an officer. The same argument is used by many a man when invited to become a member of some church, but does that prove that there is no good in churches, or that there is no God? There is but one way to make the world better, and also but one way to make any organization better, and that is by becoming a member yourself, and by your own initiative and labor, to make it better by giving it a better organization. This is a democratic world and the majority usually rules.

CONFERENCE COMMITTEE PROPOSED

California has given us so much proof as to how we should proceed to market our pecans successfully, that it seems unreasonable to think that every grower should not be willing NOW, to put his shoulder to a common wheel. Separate co-operative selling organizations will not solve the problem, as each will compete with the other. There must be in the end but one selling organization representing the industry.

I am a great believer in talking over any misunderstandings for the good of a common cause, and because the marketing of pecans is so vital to our future, I therefore ask that this convention request the secretary to appoint two members, who with himself shall name a place of meeting here during this convention, of not to exceed ten large growers or representatives of organizations, including the committee itself, for a round table discussion of this most important subject of co-operation in selling pecans, and that the chairman of this round table meeting be the Hon. L. M. Rhodes of the State Marketing Bureau of Florida.

CHANGE OF ASSOCIATION NAME

So far as I know we are all members of this association because we are interested in the pecan industry of the South, and we want to do everything we can to get the name "pecan" before the buying public. How many of us have mentioned the name National Nut Growers Association to our friends, and then had to explain that the members of this association are growers of pecans. To be using this name in view

of our present representation in the nut world as compared with the Walnut Growers and the Almond Growers Association of California is like the tail trying to wag the dog. It seems to me the name should stand for our particular industry, and to be one that would put "pecan" before the buying public. During this convention I expect to bring this matter up for open discussion and would suggest the name of our association be changed to Southern Pecan Growers' Association.

TO MAKE ORCHARDS BEAR EARLIER

To those who are here for the first time, and who may be contemplating planting a pecan orchard, I advise that they plant the better varieties that are giving the best results in their localities; that they buy first class Nursery stock; that they plant on their best well drained land; that they cultivate it each year to the forepart of July, to the bearing age, as they do their cotton; that barnyard manure be applied at the time the trees are planted, and some each year thereafter; that they apply commercial fertilizer as indicated by the results obtained by Dr. J. J. Skinner of the U. S. Department of Agriculture. If you will do this, I firmly believe you will bring your orchard into commercial bearing from two to four years earlier than the orchards that were planted ten to twelve years ago. The more care you give your pecan orchard, the more prosperity and happiness you will get out of it.

Secretary J. Lloyd Abbott, Spring Hill, Ala., presented his annual report showing receipts amounting to \$1047.10; expenditures \$10.35, up to this meeting and since \$30.75, a total on hand at time of reporting of \$42.85. Outstanding accounts payable, \$100. Forthcoming receipts for membership dues are more than enough to meet this.

An interesting resume of the paid membership of the Association was shown by years in the secretary's report:

1910—24	1914—161	1918—13
1911—66	1915—190	1919—166
1912—144	1916—180	1920—52
1913—152	1917—13	1921—358

That is a fine showing under one year of Secretary Abbot's administration. In his many recommendations for the advancement of the Association Secretary Abbot suggested that the membership dues be fixed at \$3.00 per year, with a student membership fee of \$1. He said that students at school and college would be glad to avail themselves of this proposition and that the plan would give the Association a source of supply of new members, since from letters he had received in regard to the plan it was shown that interest was such that it was proposed to form horticultural clubs in agricultural colleges, the members of which would seek membership in the Association at the student rate. Secretary Abbot suggested the advisability of an occasional bulletin to members keeping them in touch with Association affairs, although the expense of this might be saved, if desired by using the columns of the Official Journal

therefor. Secretary Abbot urged the members work for increased membership, that efforts throughout the year culminate in September as "Pecan Month," that railroad companies be asked to provide a convention railroad rate of a fare and a half for round trip; that the envelope slip advertising the Association and the Official Journal be used by members in correspondence and that Nurserymen in the Southern States be asked to circulate it freely in their printed matter; that county meetings be addressed by members in behalf of the work of the Association.

J. M. Patterson moved that the dues be made \$3 per year with a student fee of \$1, as suggested.

Theo. Bechtel suggested \$4 with the privilege to the member of obtaining a new member at \$2, reimbursing himself; in other words that the dues be \$2 with a pledge of a new member or the equivalent of an additional \$2. Finally it was decided to fix the dues at \$2 per year with a student fee of \$1.

"The Ideal Method of Developing a Pecan Orchard" was discussed by Harry U. Jackson, horticulturist, Baconton, Ga., and others. Mr. Jackson started lively discussion by endorsing the method of planting the nut and developing the tree at the point where the orchard tree is to stand, rather than to use a transplanted tree. "Setting trees instead of planting nuts is the most practiced and most practical way," said Mr. Jackson, "but damage to the tender trees in handling often results. In either method the selection of the scion is highly important, as upon it may depend the doubling or trebling of the yield of nuts. Spacing of orchard trees less than 60 to 70 feet apart will prove an error, as trees even at that distance will eventually show crowding. Trees with good roots planted 12 to the acre are likely to produce greater dividends than if planted 20 to the acre. The first few days and years are the most important. There should be intensive culture of the soil around the trees. Plow the orchard the first year every ten days. Water the trees at intervals. There should be no pruning the first year. The second year the trees should be pruned and headed to a height of five feet. Even when thus pruned branches will in time reach the ground. Little damage need result from close-up plowing. The matter of fertilization is important. Nothing is better than barnyard manure, commercial fertilizers are a substitute."

In reply to an inquiry Mr. Jackson outlined the method by which the 300-acre Bacon pecan grove at Baconton, Ga., was started. Dynamite was used where necessary in the excavating. Fertilizer was freely applied. A dozen nuts were planted at regular spaces. Seedlings were thinned out to two. Selected buds were used on the stocks. After two years all but one were pulled out in each case. This grove has proved highly successful.

W. P. Bullard—"I tried out on 100 acres the planting of the nut where the orchard tree is to stand. It did not work out well. I do not believe that there are a dozen of the original trees still standing; it was necessary to plant Nursery grown trees to replace the others. I know of a case where an attempt to follow this practice put an orchard owner back for years."

Mr. Jackson—"It is undoubtedly a little hazardous to plant the nuts, as Mr. Bullard says. These nuts were planted in January and had plenty of time to break out in the spring. I think the trouble others have had with the plan is due to the way they go at it. They stratify and wait until April to

plant. Special treatment all through is needed to succeed with the plan."

J. B. Wight—"It takes a sensible person to succeed with either method. I have trees grown both ways. It will take two to three years longer to make a grove by the plan of planting the nut. It can be done a little cheaper that way, but the difficulties are a little greater."

R. L. Scott—"I've had experience in this matter. A much better tree, with better root system, is produced in the Nursery tree. If all the pecan orchards had been planted from nuts, we would not have occasion for this association nor for a marketing organization, in my opinion."

J. M. Patterson—"When Harry read his paper, I felt sorry for the Nurserymen, but the discussion has shown that experience is heavily in favor of the nursery tree."

W. C. Jones—"We need the Nurseries, the mothers of our land."

Theo. Bechtel—"I thought this question was settled fifteen years ago. I suggest that the bearing record and all the costs of production should be known in every case under consideration."

Committees were appointed as follows:

President's address: Ralph T. Olcott, Theo. Bechtel, J. B. Wight, R. L. Scott.

Secretary Abbot named J. B. Wight and H. K. Miller as the two to act with him in selecting seven others to form the committee of ten suggested by President Simpson. These three then named J. M. Patterson, W. P. Bullard, E. C. Butterfield, H. H. Simmons, Harry U. Jackson and C. S. Parker and L. M. Rhodes, commissioner Florida State Marketing Bureau, Jacksonville, Fla., the last named to be chairman of the committee.

This committee held one session at Thomasville and adjourned for further deliberations.

Auditing: Theo. Bechtel, J. S. Wight, A. S. Perry.

Resolutions: Ralph T. Olcott, Dr. W. A. Warren, H. H. Simmons, Theo. Bechtel, H. A. Gossard, W. T. Odom, Dr. J. S. Dean, V. T. Gilliam.

Time and place: H. K. Miller, J. A. Kernodle, C. E. Pratt, R. L. Odom, Wm. P. Bullard, Ralph T. Olcott.

Nominations: Theo. Bechtel, R. L. Scott, W. W. Bassett, E. C. Butterfield, A. S. Perry.

State vice-presidents reported as to damage by scab and nut case-bearer as follows: H. K. Miller, scab not as extensive this year as last. Nut case-bearer damage which has been as high as 80 to 90%, is only 15% this year. J. Slater Wight, case-bearer 10% greater this year than last year when the loss was 10%. Wm. A. Brockhurst, scab bad on Georgia Giant. J. M. Patterson, no nut case-bearer until this year. In sections very serious. One of his 300 acre groves at DeWitt practically knocked out. Scale on Delmas and Alley. Did not spray former and no nuts. Sprayed Alley once. Theo. Bechtel, nut case-bearer damage seems to have diminished. It has never exceeded 20 to 30% in his section; this year not over 5%. Most varieties, even Stuart, show little of it. He has rosette but little scab on Success. In his Delmas grove there is no scab; it was bad there in 1913-1914. Georgia Giant is scabbing worst; Delmas and Pabst next; Success, Van Deman and Schley only a trace; Stuart less than Schley and Van Deman. R. L. Odom, nut case bearer damage heavy.

V. T. Gilliam, Funsten Co., attributed the drop of native pecans to weather conditions affecting pollination, rather than insect damage. Loss is estimated at 20%. In the West last year the weevil did great damage. A

number of carloads of native pecans in storage were so affected that the floor of the warehouse was literally covered with the worms. The trees this year show no great increase in damage from insects over last year.

J. Slater Wight explained that variation in the damage by case-bearer has been explained by the fact that the parasite of the insect cleans up the case-bearer and then having no more of such food itself passes on. Then the case-bearer in a new brood flourishes until the parasite can again accumulate sufficiently to destroy it.

Mr. Turner described the parasite as a striped light gray and black fly producing a maggot similar to that of the house fly. Mr. Patterson expressed a wish that when the case-bearer supply as food for the parasite had been cleaned up in Florida the parasite might be transferred to the Albany, Ga., district where a nice supply of case-bearer food awaited them. Some-one suggested that the case-bearer be shooed over to the almond men, but Mr. Patterson said the case-bearer is a high-toned chap and particular about his food.

Mr. Demaree suggested that in view of great scabbing proclivities Delmas trees be top-worked. W. C. Jones said he has Success, Stuart, Frotscher and Moneymaker on Delmas stumps, and no scab on them.

Mr. Turner said that nut growers generally should realize that they must spray regularly if they would have crops. Mr. Patterson said that was indeed true; that growers must spray every variety. "What we need to be told," said he "is what kind of spray to use for various purposes. There are three dark spots on the pecan sky: Kernel spot, scab and nut case-bearer. But I am firmly of the opinion that ways will be found to meet these difficulties. They are no greater than those which have been met by fruit growers generally."

W. P. Bullard, president of the National Pecan Growers Exchange discussed results accomplished by that organization. In the discussion which followed Mr. Bullard explained that prices for this season have been fixed by the Exchange at: Apex brand best nuts, 45c; Junior brand, second, 30c; and a Near Grade at 35 to 40c. These prices are net. The broker's commission is 5%. "We experimented to separate the faulty nuts. It is difficult to do. We tried blowing them out and sucking them up from a table. It is much easier to separate faulty walnuts from good ones, because the rough shell of the walnut takes the air pressure better; the walnuts are more uniform in size, too. We have this year been more successful by the use of the cracking test. A selection of 100 nuts is taken from a lot. These are cracked and the percentage of faulty nuts is regarded as a fair indication of the quality of the entire lot. That's the way the walnut people have operated. If they find 90% good they guarantee 80%. We find cold storage nuts come out in perfect form. These are marketed promptly and we have no record of what their condition is long after leaving cold storage. That is an important question."

Mr. Patterson—"We might class as low grade pecans those smaller than No. 2 or the Junior brand of the Exchange. There is a certain percentage of these in every grove. If the nut has no other fault than undersize it can easily be disposed of. But those of inferior quality, kernels rusty, dark, pithy or affected by kernel spot, the problem is great. It is difficult and it may be impossible, to detect these which are usually mixed with nuts of high grade. In the

case of blank nuts, 95 to 99% can be eliminated. It is the nuts with soft kernels, kernels with withered ends, etc., though of normal size and weight, that it is almost impossible thus far to separate when in the shell. In 1921 we had in our orchards at Putney, Ga., a considerable quantity of such nuts. One way to dispose of these is to push sales of them to regular customers; second, by disposing of them to street vendors and unscrupulous fruit and nut dealers of the cities. Such practice is a great injury to the pecan industry. The memory of the quality of any product remains with the purchaser long after the price has been forgotten. The paper-shell pecan is sold as a quality nut. Low grade nuts should be kept off the market. When we found how certain lots in our 1921 crop were running, we withdrew them from sale.

"So far as I know, the only way to handle such lots of nuts is to crack them and select the good kernels for preserving by the vacuum process in glass jars and tin cans. This we have been doing successfully. There is demand for cracked pecans, though the demand for large meats at a price compared with that of such meats in the shell is limited. There is a market for paper-shell pecan kernels when packed air tight in which form they will keep indefinitely. It is a salvage proposition, the only safe way to market low grade nuts so far as I know. One may get away once with the practice of shipping such nuts in the shell, but soon he would find he was without an outlet. After the first sale the pecan must sell itself. The time is fast passing when the pecan will not sell merely on its size. "Canners" is the trade name for low grade nuts.

As you prize the unique reputation of the pecan as a quality nut—the king of nuts—and as you desire an ever-increasing market at a reasonably remunerative price, keep low grade nuts in the shell off the market. The man who does this is the friend of the industry, and vice versa. When along in December we found an increasing percentage of defective nuts in portions of our crop, we installed cracking machines and cracked 145,000 pounds of nuts for vacuum process packing in glass and tin. We find an increasing demand for such packages. But the price of such nuts to the packers is low—only about 25c a pound—as compared with the price of pecans in the shell. As I said, it is a salvage proposition.

"So far as I can see now, we are not going to have enough nuts to supply the demand. We shall be glad to buy low grade nuts for this purpose, at a price at which we can afford to handle them, depending on the quality. We do not care to make any money on them, this year. It is a matter of keeping the trade supplied. We'd like 200,000 pounds of low grade nuts for cracking. As an indication of how the consumer is taking to this idea, we are duplicating filling of orders from a section in California right in the heart of the walnut industry! The Funsten Company is also packing nuts by the vacuum process. Neither of us knew that the other was working in this idea. Another concern, the Kelling-Karel Co., was unsuccessful because it sold for less than it cost to produce the goods. We do not get more for Schley kernels than for any other kernels in this process. If one-third of a lot of Schley or other nuts for this purpose is faulty, the price would be 18 to 20c."

President Simpson—"So even at that price,

it is better than one could do with them in the shell."

H. H. Simmons said that a low grade of pecans sold by street vendors in his home city, Jacksonville, Fla., hurt the pecan trade, especially, because many tourists pass through or stop over in Jacksonville and thus gain a wrong impression as to the quality of paper-shell pecans. Those vendors obtain their stock at a low price and advertise them from their street stands as 'Georgia Paper-Shell Pecans from the Groves Direct to the Customer.' Not more than 20% of these crack out perfect.

Mr. Kernodle thought it a fortunate thing that Mr. Patterson's offer to handle faulty nuts was available, as giving opportunity to dispose of such nuts at a price within a cent or two of what they could be sold for in the shell, and avoid doing damage to the industry.

When the question of Association finances came up President Simpson called upon Mr. Patterson to explain the plan by which members could directly aid the Association. Mr. Patterson asked members to pledge the acquisition of members and to turn in to the treasury the lump sum at this time, reimbursing themselves later by getting new members and retaining the fees up to the amount of their pledges and advance payments. About \$400 representing 200 new members to be obtained was thus paid into the treasury, in addition to many payments of membership dues at the meeting by present members. The Association will give a copy of the 1921 annual proceedings to each new member under this plan.

The editor of the *American Nut Journal*, official organ of the Association, announced that the combination price of \$3.25 to include one year's membership and one year's subscription for the *Journal* is regularly in force. All memberships secured under the advance payment plan above explained may include a subscription for the *Journal* upon payment of \$1.25 which may be sent either to the secretary or to the *Journal* directly.

The program as published was followed closely, most of the participants named being present. Space does not permit a complete report in this issue. Report will be continued in the next.

Following is the report of the committee on resolutions:

Resolved, That this Association desires to express its appreciation of the earnest and practical work by the U. S. Bureau of Plant Industry throughout pecan territory, to the papers and discussions they constantly present; also to all those on the program of this convention whose participation has been of unusually high order, to the able direction of the presiding officer which has brought to a successful conclusion a program of marked value and interest, and to the program committee.

Resolved, That this Association expresses its special appreciation of the work of the committee on legislation of the Georgia-Florida Pecan Growers Association of which J. M. Patterson is chairman, in securing an increased appropriation from the Federal government to be used in the eradication of insects and diseases affecting the pecan, and for securing an increase in the tariff rate on pecans for the protection of the industry.

Resolved, That the sincere thanks of this Association be extended to the local arrangement and entertainment committee and especially to Messrs. Stone and Parker of that committee; also to the management of the hotel headquarters, to the citizens of Thomasville generally and to the *Thomasville Times-Enterprise*.

The committee on time and place reported in favor of Selma, Ala., the second week in October, 1923. The convention decided in favor of Jacksonville, Fla., the first week in October, 1923, after listening to a glowing

account of attractions by H. H. Simmons, of that city. Opeleika and Fort Valley, Ga., were the other places suggested.

The committee on grades and standards recommended that the subject be referred to a committee of representatives from the National Pecan Exchange, the Georgia-Florida Pecan Growers Association, laymen and the National Pecan Growers Association.

The committee on nominations recommended and the Association elected:

President: Charles A. Simpson, Monticello, Fla.

First vice-president; J. M. Patterson, Putney, Ga.

Second vice-president: E. C. Butterfield, Winona, Tex.

Secretary: J. Lloyd Abbot, Spring Hill, Ala.

Treasurer: J. Slater Wight, Cairo, Ga.

Executive committee: Harry U. Jackson, Baconton, Ga.; B. W. Stone, Thomasville, Ga.; J. B. Wight, Cairo, Ga.; Theo Bechtel, Ocean Springs, Miss.; Mrs. T. A. Banning, Robertsdale, Ala.

State vice-presidents were named as follows, those for other states being the same as those who served last year:

Alabama—Dr. P. M. Hodgson, Stockton.

Florida—H. H. Simmons, Jacksonville.

Georgia—R. B. Small, Macon.

Louisiana—Guy T. Stubbs.

Mississippi—D. R. Weston.

Missouri—V. T. Gilliam, St. Louis.

New York—Ralph T. Olcott, Rochester

Pennsylvania—Elam G. Hess, Manheim.

Texas—R. W. Fair, Arp.

J. M. Patterson, upon request of the chair accepted for all the officers. President Simpson expressed appreciation of the general co-operation which made it possible to present all the features of the long program, and predicted a successful year to come.

The chair named as the standing committee on Federal and State aid; J. M. Patterson, Robert C. Berckmans, Dr. A. Caswell Ellis, H. H. Simmons, J. Lloyd Abbot, Elam G. Hess, Theo. Bechtel, Ralph T. Olcott.

The convention then adjourned.

A special despatch from Thomasville to the *Atlanta Constitution* Oct. 5th said: Among members of the National Pecan Growers Association from this section of the pecan belt who have found the pecan industry profitable are C. A. Simpson, of Monticello, Fla., president of the association; his brother, R. C. Simpson, and H. K. Miller. These men came years ago and went into the Nursery business. J. B. Wight, of Cairo, had one of the first Nurseries for pecan trees in Georgia. His trees have been shipped all over this country and to some foreign parts. C. A. Van Duzee, of Cairo, also has been most successful in pecan growing, coming from the northwest to Cairo.

R. J. Bacon, of Albany, is one of the members of the well-known Bacon family whose pecan groves near that city are the admiration of visitors. B. W. Stone, of this city, is one of the pioneer pecan men, as are C. S. Parker, and others.

In Pennsylvania

Charles G. Bolton, Zieglerville, Pa., reports a fair crop of shellbark hickory nuts. Black walnuts are scarce. He planted last spring grafted Persian walnut, pecan, hickory and persimmon trees; also Japanese chestnut. He has a number of black walnut top-worked with Persian walnut which made a four-foot growth this year. He did not lose a tree of this year's planting. All are thrifty.

Paraffin in Hot Climate

Editor American Nut Journal:

Referring to an experience of Stuart B. Garbutt, Princeton, Cal:

I am interested in his statement that grafts grew beautifully according to my paraffin method, but that they were killed subsequently by melting of the paraffin in the hot California sun. This sort of thing is in accordance with our common experience in other fields of work. Methods which are adapted to one section of the country vary in other sections to such a degree that a very little change may result in such success or failure of change of method. I am very sure that Mr. Garbutt can adapt the paraffin method to California conditions with a little experimentation. The main thing is to get the grafts sprouted and under way. This apparently occurred nicely and the injury came subsequently in Mr. Garbutt's experience.

My first suggestion would be to experiment with larger proportions of stearic acid which may be added to paraffin in almost any proportion. Stearic acid may be purchased from any druggist. It is the material that is added to paraffin by candle makers in order to make a candle stand up in hot climates. The second suggestion would be to go over the point of junction of scion and stock with white paint in addition to the other resource after sprouting is well under way. The white paint would reflect the heat away from the paraffin. This would seem to include the idea of a bit more trouble than some men like to take. On the other hand letters from all over the country and from other countries tell me of the success that amateurs as well as professionals are finding by way of the new paraffin method of grafting.

The only other trouble that I have heard of in connection with the paraffin method related to cold rather than to heat. When grafting has been done farther north early in the spring with paraffin cooled too quickly, it made too thick a layer. This layer would crack subsequently. Paraffin to be applied successfully must be put on in an extremely thin layer and must be hot enough to run like varnish at the time.

ROBERT T. MORRIS.

New York City, Sept. 22.

Shagbark Hickory in Canada

The Colborne, Ontario, Canada, Express says:

A lot of advice is being given to Canadians about the planting of nut-bearing trees instead of those useful only for shade. This is good advice, in essence, because it is never profitable to grow any tree when a better one might be grown. At the same time the words of over-enthusiastic friends of this or that heat-loving tree must be carefully weighed before embarking on any considerable planting project in this country. The chief foresters of the different Provinces of the Director of Forestry at Ottawa can be relied upon to give disinterested and expert advice on this subject. There is one tree, however, which ought to be planted much more than it is, namely, the hickory, and preferably, the shagbark hickory. This tree is a native to the southern parts of Quebec and Ontario, and would undoubtedly grow well outside of its present range in these Provinces, and also in large parts of the Maritime Provinces and British Columbia. Its nuts are edible, some strains or varieties producing better nuts than others, but the planting of shagbark hickory is advocated chiefly because it is one of the strongest and

THE SOUTH'S LARGEST AND MOST DEPENDABLE PECAN NURSERY

Over Half Million Pecan Trees Growing.
64 Acres in Nursery Alone.



Buy the best rooted, budded Paper Shell Pecan trees **FROM THE LARGEST EXCLUSIVE PECAN NURSERY WEST OF THE MISSISSIPPI RIVER AND ONE OF THE LARGEST IN THE SOUTH.** 90 to 100 per cent of our Pecan trees live. Will the trees you have been buying do this?

A good lateral root system like we grow, and like is shown on the left side of picture is the life and making of a pecan tree, and they must have these roots if you grow them successfully.

You can buy our well rooted pecan trees just as cheap, and in many cases cheaper direct from us than you can get the trees like are shown on the right of this picture from other nurseries or their agents.

We dig them well, pack well, and get them to you in first class condition.



The Root System We Grow

The Kind of Roots Most Others Grow

Haven't you been buying trees with roots like the ones shown on right side of picture that didn't have scarcely any side roots? Did they give good satisfaction? 90 to 100 per cent of our trees live and grow on account of the wonderful lateral or side root system they have which enables them to reach out in all directions from 24 to 36 inches and gather all the necessary plant food and moisture. Our trees will be worth three times more to you than the poorly rooted trees that are grown by 90 per cent of the pecan nurseries.

TEXAS PECAN NURSERY

ARP, SMITH CO., TEXAS

R. W. FAIR, Manager.

We Sell by Mail Only and Save You the Middle Man's Profit.
If you are interested in pecan growing write for our 32-page **FREE** booklet on "How to Grow Paper Shell Pecans."

Send in your order at once so you can get the sizes and varieties you want.

PEACH TREES—Write to Fair's Peach Nursery, if you want peach trees in any size lots. The trees are fine and the prices right. Large orders especially solicited.

most useful woods in Canada and because it is rapidly disappearing. One point in favor of the hickory is that young trees taken out of the plantation in thinning, even when very small, can be disposed of to advantage for tool handles and vehicle parts. Thus a considerable revenue comes in to the owner while he is waiting for the main crop to become ready to harvest.

The Man Who Rocked the Boat

By A. S. Perry Cuthbert, Ga.

Oats and bermuda grass have no place in a well kept pecan orchard. I know that at least one very successful grower will take issue with me here, and I realize that I would make a rather sorry sight in attempting to argue any horticultural question with him, but facts are stubborn things. Now, pecan trees have grown for this horticultural wizard in the midst of oats and bermuda grass, but they have not done so for my neighbors and I don't attempt to prove his theory by showing his splendid trees, I can only wonder as to what magnificent proportions they would have grown had they not been so handicapped with small grains and

grass. Potatoes, and in some sections tobacco, and perhaps other truck crops, if highly fertilized, will return a handsome profit in money for the man; but unfortunately they deplete the store of available plant food in the soil, and through all the coming years outraged nature will demand her pound of flesh, and levy a tax on the bearing quality of the trees. The man who rocked the boat or lit his pipe in the powder magazine is a modern Solomon, a very paragon of wisdom, as compared to him who will so handicap his pecan orchard. Sweet potatoes are to be avoided for the further reason that they tend to prolong the trees' growing season until late in the fall and thereby increase the danger of winter killing.

Vidalia, Ga., Oct. 4—Land with bearing trees is held quite tightly in this section, an owner with thirteen acres near here having repeatedly refused \$1000 per acre for his plantation. Other growers who have developed good trees to the bearing age find ready sale for all the nuts at prices which average them from to three hundred dollars per acre income per year.

American Nut Journal

COVERING NUT CULTURE

NORTH—SOUTH—EAST—WEST

AMERICAN FRUITS PUBLISHING CO., INC.
50 State Street - Rochester, N. Y.

RALPH T. OLCOTT, Editor and Manager
Official Journal Northern Nut Growers' Assn
Official Journal National Nut Growers' Assn

SUBSCRIPTION RATES

One Year, in advance.....\$2.00
Canada and Abroad..... 2.50
Single Copy20

ADVERTISING RATE

Per column inch.....\$2.80
Forms Close 10th of each month

ROCHESTER, N. Y. OCT. 1922

NUT ASSOCIATIONS

California Almond Growers' Exchange—President, G. W. Pierce; manager, T. C. Tucker, 311 California St., San Francisco.

California Walnut Growers' Association—President, C. C. Teague; secretary, W. T. Webber; manager, C. Thorpe, 1326 East Seventh St., Los Angeles, Cal.

Georgia-Florida Pecan Growers Association—President, J. M. Patterson, Putney, Ga.; vice-pres., A. C. Snedeker, Blackshear, Ga.; sec'y-treas., J. S. Wight, Cairo, Ga.

National Pecan Growers Association—Pres., Charles A. Simpson, Monticello, Fla.; vice-pres., J. M. Patterson, Putney, Ga.; and E. C. Butterfield, Winona, Tex.; secy., J. Lloyd Abbot, Spring Hill, Ala.; treas., J. Slater Wight, Cairo, Ga. 1923 meeting, Jacksonville, Fla., Oct. 2-4, 1923.

National Pecan Growers' Exchange—President and manager, William P. Rullard, Albany, Ga.; vice-pres., J. B. Wight; secy-treas., A. D. Galt.

Northern Nut Growers' Association—President, James S. McGlennon, Rochester, N. Y.; vice-pres., J. F. Jones, Lancaster, Pa.; treas., Willard G. Bixby, 32 Grand Ave., Baldwin, N. Y.; secy., Dr. W. C. Deming, Georgetown, Conn. 1923 convention, Washington, D. C., Sept. 26-28

Southeast Georgia Pecan Association—President, Dr. W. H. Born; vice-pres., Col. G. H. Harris; secy., J. H. Girardeau, McRae, Ga.; treas., E. F. McRae.

Texas Pecan Growers' Association—President, H. G. Lucas, Brownwood; vice-pres., John P. Lee, San Angelo; Secretary, Oscar Gray, Waxahachie.

Western Nut Growers' Association—President, Ferd Groner, Hillsboro, Ore.; secy-treas., C. E. Schuster, Corvallis, Ore.

"Nut trees will frequently succeed where ordinary fruit trees fail," writes F. F. Rockwell, of Farm and Fireside, "as they are not particularly exacting in regard to soil and climatic conditions. This is particularly true of the hardy varieties of black walnut, pecan and heart nut.

"Destroy the fall webworm and the pecan or walnut defoliator in your trees by burning, or by dipping into a bucket of water covered over by a thin layer of kerosene," the pecan grower is advised by Professor J. R. Watson of the Florida Experiment Station.

The W. R. Stuart pecan groves and home at Ocean Springs, Miss., are offered for sale, according to formal announcement in another column. This is the home of a pioneer in pecan culture.

A reader asks whether there is a market for pecan shells. Can any of our readers answer this query?

If it relates to nut culture it should be in the AMERICAN NUT JOURNAL. Please send it in.

NATIONAL PECAN GROWERS

Definite progress year by year marked the recurring conventions of the pecan growers of the South. In explanation of the above heading, it should be stated that at the twenty-first convention in Thomasville, Ga., Oct. 3-5 the name National Nut Growers Association was changed to National Pecan Growers Association, on the ground not only that the latter better expresses the character of the organization but also that the members were losing a valuable advertising asset by not having the word "pecan" in the name of the Association, it being necessary under the old name to explain that it was an association of pecan growers. It has been noted that the walnut and almond growers of California were profiting directly by every mention of the very definite names of their organizations. It was desired by some to adopt the name Southern Pecan Growers Association as being still more distinctive, but the word "National" was retained on the ground that the membership is nearly national.

The convention was characterized by the presentation of an unusually high order of formal papers for discussion. This fact was especially recognized in resolutions adopted. Seemingly every important present day phase of the industry was touched upon in the proceedings and main topics were discussed by able men.

Damage by insect and disease was a leading topic. The damage has become serious but the members are setting about finding remedies and are confident that the trouble will be overcome. It is realized that systematic spraying of pecan trees everywhere must be resorted to in order to insure crops. The demonstration of spraying apparatus at the convention attracted considerable attention.

Those who attended the convention were abundantly repaid. More pecan growers of the South ought to seek the advantage of Association membership and make it a special point to attend the annual meetings which constitute veritable institutes of valuable experience and information.

All the officers were re-elected and the Association voted to meet the first week of October next year in Jacksonville. Only a portion of the proceedings can be reviewed in this issue. More later.

While the pecan crop is light this year, it is believed the trees are preparing for a bumper crop next year. Marketing of the crop is a subject uppermost in the mind of progressive growers and plans are under way to make this still more effective.

NUT GROWING FOR WOMEN

There frequently come to our desk accounts of nut growing by women. In every case the women are enthusiastic growers. There is every reason for such work by women. Nut trees need care, and most women have time to give it. Women may well turn their attention to this outdoor avocation as one which attracts from the outset and becomes increasingly interesting. A case in point is the experience of Miss Jessie M. Crosby, Kansas City, Mo., long a member of the Northern Nut Growers Association and subscriber to the Journal. She tells in this issue of what both seedling and grafted trees have done for her.

President McGlennon of the Northern Association has paid particular attention to interesting women in nut culture and in encouraging those who have taken it up. The membership roll of both the Northern Association and the National Association and the subscription lists of the American Nut Jour-

nal contain the names of women North, South, East and West who are growing nut trees. We welcome all and suggest that the sisters get others to take up the newest and most interesting phase of horticulture.

WHY NOT NUT ORCHARDS NORTH?

Omer R. Abraham, Martinsville, Ind., reports that his Stabler, Thomas, Ohio and Miller black walnuts are bearing.

"I find some yearling grafts with several nuts on them," he says. "I consider grafted walnut bearing at one year remarkable."

So much for Indiana.

Well, there does not seem to be much risk in planting improved black walnut trees in the Northern states. Why is it not being done in commercial orchard form extensively?

J. J. Kelsey, Clinton, Conn., writes under date of September 6th:

"We have in this locality two Japan walnut trees more than fifteen years old; one a Sieboldiana, the other a cordiformis. The latter is bearing this year about two bushels of nuts and the Sieboldiana about twelve bushels. The Sieboldiana nuts are bringing as high as \$7 a bushel.

"The next oldest Japan walnut trees here are four trees about six years old. All are bearing. One is a Sieboldiana; another is a cordiformis. Have not been able to procure nuts from the other two. None of these are grafted trees. Mr. Bixby, who examined the large cordiformis tree thought the meat tasted better than any other cordiformis he had tasted.

"I have about forty nuts of the second generation of the Royal hybrid this year. The shells of these nuts are smooth and not much thicker than those of English walnuts.

"Two more of the Buddy nut trees have come into bearing this year and have produced the large fine nut. We have one Buddy nut tree about thirty-five feet high, six years old, that bore a bushel of nuts last year, and this year will have nearly two bushels. The Buddy nut when dry cracks out 100% whole halves.

"The Miracle chestnut has passed another year without attack by the blight."

So much for Connecticut.

J. Ford Wilkinson, Rockport, Ind., has ten acres of grafted northern pecan trees coming along, soon to bear nuts of named varieties. He reports a fine crop of pecans on the native trees of Southern Indiana this year, and he is offering native hickory nuts and black walnuts in quantity.

So much for Indiana again.

A. C. Pomeroy English Walnut Farms, Lockport, N. Y., expects to harvest 6,000 bushels of English walnuts from fourteen-acre orchard. Members of the Northern Nut Growers Association visited this orchard last month.

Propagated varieties of European filberts from the McGlennon-Vollertsen Filbert Nursery, Rochester, N. Y., are being planted widely over the country and the demand for the plants is greater than the supply. Members of the Northern Nut Growers Association visited this Nursery last month.

So much for New York.

E. A. Riehl, Godfrey, Ill., for some time has made marked success with his commercial orchards of propagated chestnuts and walnuts, the Chicago market taking all he can produce, at high prices.

So much for Illinois.

As the result of the remarkably successful results in the planting in Michigan of nuts from walnut trees on the George Washington estate at Mount Vernon, considerable

planting of walnuts throughout Michigan is reported.

So much for Michigan.

What about the other Northern states? Where are the orchards of nut trees being planted? Will the state vice-presidents of the Northern Nut Growers Association kindly advise what is being done in nut tree planting in their states? The movement is on. J. F. Jones, Lancaster, Pa., has fine propagated nut trees of several varieties in his nut nurseries. Every one of those trees ought to be in some orchard in Northern states.

The demand for black walnuts that will crack out in perfect halves and for hickory nuts with shells as soft as those of the finest pecans and kernels of quality which it has been declared will command a market price equal to that of the Schley pecan ought to be so great that Nurseries of the Northern states would be working overtime to supply the propagated trees for planting in orchard form.

The Northern Nut Growers Association after more than a decade of persistent investigation, experimenting and propagation has produced high grade improved nut trees; Dr. Robert T. Morris and J. F. Jones have supplied the means for budding and grafting so that 75 to 90% of stands are secured.

The stage of planting here and there a nut tree for ornament or curiosity or experiment has been passed. The commercial orchard stage has arrived. Fine varieties of Northern propagated nut trees have been listed by the Northern Nut Growers Association which has also posted a list of approved Nut Tree Nurserymen, and has repeatedly outlined methods of planting and care of the trees. Prof. Brooks has covered the ground work for combating any diseases which may appear.

Brokers and dealers are calling loudly for the nuts. Why not produce them?

THE NORTH'S OPPORTUNITY

The time is ripe for aggressive work for nut culture in the Northern states. Earnest, intelligent and persistent work on the part of the Northern Nut Growers Association for a decade has made available improved walnuts, hickory nuts, chestnuts, filberts, pecans and butternuts having the qualities, in comparison with native nuts, that characterize the paper-shell pecan of the Southern states.

In the South the pecan is on a commercial basis. The nuts named above ought to be forthwith on a commercial basis in the North—that is to say, growing in orchard form for marketing as are other fruits.

What is needed is rapid extension of organized effort to bring about active development of a Northern nut industry. The value of nuts as food is admitted on all sides, but this fact should be brought home to thousands of persons in every Northern state. In no way can this be so effectively done as by personal propaganda—exhibits and lectures by one or more expert nut growers, men who have had successful practical experience based upon scientific investigation and experiment, leading to direct results.

Just such a man is available, we believe, in the secretary of the Northern Nut Growers Association, Dr. William C. Deming, Hartford, Conn.

What is urgently needed right now is a capable man who can travel through the Northern states, devoting his entire time to lecturing on the highly interesting subject of Nut Culture, with stereopticon slides and nut exhibits. This subject undoubtedly

ANNOUNCEMENT OF NORTHERN NUT FUND

FOR the purpose of maintaining a Field Secretary to devote his entire time to delivering illustrated lectures and making exhibits of improved Northern Nuts throughout the Northern states, to the end that a commercial nut industry in those states may be developed through the planting of orchards and the intelligent marketing of the crops, in connection with the activities of the Northern Nut Growers Association, we, the undersigned, take pleasure in donating the sums set opposite our names, the amounts of which we are forwarding to the treasurer of the Northern Nut Growers Association, Willard G. Bixby, Baldwin, Nassau Co., N. Y., it being understood that the donations will be duly acknowledged and published in the *American Nut Journal*, the Official Journal of the Northern Nut Growers Association:

WHAT IS NEEDED

A fund of \$5,000 is needed.

For full time of Field Secretary, \$3,000.

For expenses, \$2,000.

For the first year this would provide for much effective work. Later operations could be extended. In addition to considerable propaganda by mail, the subject could be handled through representation by the Field Secretary on the programs of annual meetings of the horticultural and agricultural societies, granges, etc. Chambers of Commerce, Rotary Clubs and other public-spirited organizations would doubtless provide assembly places without cost and local newspapers would announce meetings freely.

The Northern Nut Growers Association has 250 members. An average of \$20 apiece would do the trick.

WHO WILL BE THE FIRST?

Here is a tentative schedule for the first twenty-four:

1.....\$1000	9.....\$50	17.....\$25
2..... 500	10..... 50	18..... 25
3..... 500	11..... 50	19..... 25
4..... 100	12..... 50	20..... 25
5..... 100	13..... 25	21..... 25
6..... 100	14..... 25	22..... 25
7..... 100	15..... 25	23..... 25
8..... 100	16..... 25	24..... 25

Donations for the worthy cause will be ac-

would attract large audiences at every opportunity, for it is novel and quickly gets a hearing whenever broached.

The Northern Association needs such work to extend its influence for nut culture, and it is fortunate that there may be a chance to command the full time of Secretary Deming for the country-wide presentation we have suggested. It was with this very idea in mind, we are sure, that President McGlennon at the recent convention of the Association urged repeatedly the advisability of increasing the membership so that funds might be provided to put a man in the field for such work.

We urge that this matter be given special attention by the influential members of the Northern Association at once, to the end that Dr. Deming or some other equally capable man be secured to start on this work. We suppose that a salary of \$3,000 might be sufficient to command the services of such a man—at least for the first year or two. At the end of that time we confidently predict that such work would become self-supporting in the increase of paid membership of the Association—annual, contribut-

known and listed in the order in which they are received.

Write or wire the Journal.

Donations are contingent upon the total reaching \$5,000 and are payable when that amount has been pledged.

Wire your donation if you would be well up toward the top.

It is believed that far-seeing, public-spirited persons will be found outside of the Association to give this movement a big boost.

Very special mention will be given those who come in on the 1-2-3 class above.

Write or wire the Journal.

There are large land owners to whom it would be of direct benefit to be able to harvest valuable crops of nuts in the time it usually requires to make a commercial crop of winter apples. In the case of black walnut and other nut trees the steadily accumulating timber value is an added inducement over the crop propositions. The work of the Field Secretary would be directly in the line of providing cash dividends for such persons.

For the benefit of the above Class 1 in the tentative schedule can be extended.

Write or wire the Journal.

Amounts of more than one hundred dollars can be paid in quarterly installments if desired.

One hundred donations of \$20 each will complete the fund after the First Twenty-four schedule is filled.

And that accounts for only half the northern Association membership! Easy, isn't it?

Who'll be the first?

Who'll be the First Twenty-four?

Write or wire the Journal.

THE SLIDES ARE READY

Secretary W. C. Deming, Northern Nut Growers Association, announces that Prof. L. C. Corbett, horticulturist in charge, Bureau of Plant Industry, U. S. Dept. Agr., makes this interesting offer:

"We will be very glad indeed to arrange to loan stereopticon slides to any member of the Nut Growers Association who may wish to use them, providing the Association will see to their transportation to and from the Department."

Wire or write the Journal.

ing and life membership—and in the practical support which would be forth-coming for such an important project.

Perhaps the officers and executive committee will start this matter and if thought advisable call in as members of a special committee a dozen or more of the leading members of the Association.

Let us raise a fund for this special purpose.

Sam H. James, Mound, La., has been growing pecan trees 45 years. No one now living has so long a record as that. He began in February 1878. He has learned much in more than four decades of practical experience. He is a strong advocate of nuts, fruits and vegetables instead of meat as food.

Nuts in Tree Trunk

A writer in the Antwerp, N. Y., Gazette says. While in California last winter I saw several oak tree trunks pitted as if by smallpox. The holes are made by woodpeckers, and in every hole is an acorn placed there by squirrels. The nuts are so firmly imbedded that it is impossible to remove them with the fingers.

ECHOES OF ROCHESTER CONVENTION

Editor American Nut Journal:

The thought has occurred to me that you will be interested in learning what some of our leading members had to say about our filbert enterprise after seeing it at convention time.

Under date of Sept. 12th, Mr. Jones writes me as follows: "I enjoyed the convention at Rochester very much. I was mighty glad to see your filbert proposition so prosperous. In my imagination now I can see big filbert orchards in York State in the not far distant future as a result of this orchard grown by Mr. Vollertsen and yourself. Owing to the quarantine on this class of plants from Europe, however, Nurserymen have to depend upon home grown filbert plants and the supply is very short at present."

The following is from a letter from Mr. Bixby dated Sept. 11th: "It has been my good fortune to attend many conventions of the Northern Nut Growers Association, but I do not know of any that I believe more profitable from the standpoint of seeing nut culture on a commercial basis, or at least, approaching it. There has been no other convention that has shown so much. While the filberts in your Nursery have been grown for propagating new plants, rather than for raising nuts, yet the nuts on them this year are sufficient to impress anybody with the possibilities of filbert culture. What I saw at Lockport is more eloquent a testimony than I have ever seen before as to what can be done with walnuts in the fruit belt of western New York."

Dr. Deming, under date of Sept. 13th, says: "I wish to congratulate you on the success of the convention and on the excellent preparation that you had made for it. Your filbert Nursery was all that I could have expected and is a great credit to you and to Mr. Vollertsen."

A. C. Pomeroy, under date of Sept. 14th writes: "Perhaps I was so situated, at various times during the meeting to hear more than you did, just what the members thought of your filbert Nursery. Without one exception, everyone was much surprised and delighted to note the wonderful progress you have made in filbert culture. You surely have proven what can be accomplished by any who wishes to plant these valuable shrubs."

M. G. Kains, of Suffern, Rockland County, New York, horticultural consultant and lecturer-editor, writes under date of Sept. 11th: "I wish to thank you especially for the opportunity to see your filbert orchard. Heretofore I have not been very enthusiastic about this nut, but what I saw there has changed my opinion. I believe I can place a good many plants with my clients."

At the convention, Dr. Deming asked for a small quantity of nuts of our different varieties for the purpose of showing in his lectures and in writing Mr. Vollertsen in this connection, under date of Sept. 22, he says: "It is a pleasure to say that your filbert Nursery is a delight to behold and the first demonstration of the possibilities of the filbert in the East. You may well believe that it was a great sight for the members of the Association, long craving for just such demonstrations."

JAMES S. MCGLENNON.

Paris, Texas, Sept. 5—George T. Wright of Paris, who owns a farm on Red River, opposite the mouth of the Klomatia, last month budded 400 pecan trees and expects in a few years to have an extensive orchard

in bearing. P. B. Gibbons, also of Paris, who owns a farm on the river in Bowle County, has budded 200 pecan trees.

English Walnuts in Canada

W. J. Strong, Horticultural Experiment Station, Vineland, Ont., Canada, says:

The English walnut (*Juglans regia*) is not at present a commercial crop in Ontario, but it will grow and bear successfully in the Niagara District and Southwestern Ontario. There are individual bearing trees through the Niagara District notably around St. Catharines, Port Dalhousie, Vineland (Experiment Station) and Grimsby. While it may never become as important a crop as the peach, yet there is no reason why more trees should not be planted in favored locations which would in time give a valuable crop of nuts.

The trees seem to prefer comparatively cool summers and mild winters. It is about the same hardiness as the peach or sweet cherry and requires pretty much the same soil conditions.

Extensive plantings of English walnuts may not be advisable at the present time, but every fruit grower, farmer or householder in the warmer sections of Ontario who has suitable soil could plant a few trees to furnish his own requirements of this valuable nut.

Mexican Bean Beetle

Cropping and cover-cropping methods in the South are likely to be radically affected if the Mexican bean beetle lives up to the predictions made by the Bureau of Entomology of the United States Department of Agriculture. It is expected that the bean beetle, which is already established in 36 Georgia counties, as well as in 35 in Alabama, 34 in Tennessee, 2 in Kentucky, 2 in North Carolina, will probably be distributed southward, and westward to the Mississippi River, as well as following the main direction of spread, northward to the Michigan and New York bean areas. At points in Tennessee where it was found only after close inspection

in 1921, the beetle is now causing great concern among growers.

Woman Enjoys Nut Growing

Editor American Nut Journal:

I own a farm in Southeastern Kansas. In March, 1921, the State Agricultural College at Manhattan, Kansas sent me four seedling pecan trees. 100% lived. Three of them leaved out from the old tops but the fourth one came from the roots. Last December we burned off a part of the cultivated ground and the fire got beyond our control. The fire swept over the nut trees and part of the fruit orchard. The tops were destroyed. While most of the fruit trees were killed the four pecan trees put up new tops and the growth they have made is a joy to behold. So much for transplanting pecan seedlings!

Last December I put out 78 grafted pecans, 79 black walnuts and 99 chestnuts. Of the 78 pecans, 70 are living; of the walnuts planted only 35 are living and of the 99 chestnuts only 18 lived.

Besides these trees I have ten trees of the Burbank Royal Black walnuts.

Of course this is only the first year these trees have been out. Some of them may not live over the second year and others that appear lifeless now may come up from the roots. I am delighted to get a tree established, even though it is below the graft, for it may be top-worked later.

MISS JESSIE M. CROSBY.

Sept. 16, 1922.

Kansas City, Mo.

Dr. J. P. Henderson, Chicago, Ill., is president of the Central American Association which is planting large tracts of land in Central America to fruits and nuts. The land is 3500 feet above sea level, the temperature is never higher than 78° nor lower than 52°. Bitter wild almonds grow profusely there; they have the black walnut and wild olive.

A Moon-Bathed Dream of Beauty

How Dixie May Be Restored, Though Snowy Fields of Cotton Melt Before the Blighting Touch of M. B. Weevil

By A. S. Perry, Cuthbert, Ga.

Yesterday's ideas do not fit today's ideals. When conditions shift, opinions must be adjusted accordingly. There was a time when the virgin resources of our country were so great that men made money in spite of themselves, but two hundred years of willful waste have brought us to the verge of woeful want, and today we stand face to face with the stern reality that outraged nature refuses longer to be cheated. Verily "The fathers have eaten sour grapes and the children's teeth are on edge." What was once a fairy land of flower gardens and fertile farms is today in many instances a barren waste of abandoned fields, overgrown with briars and scarred with gullies, all caused by the soil robbing, land skinning methods of the past. To reclaim this Paradise Lost is the problem that confronts the South today. To solve it we need ideas, big ideas, and big men with broad vision to execute them.

In this gathering of the leading horticulturists of our nation I am sure, are to be found men of sufficient caliber to overcome the lions in the way, and to restore Dixie to her rightful place among the Sisterhood of States, and as our snowy fields of cotton melt before the blighting touch of the Mexican Boll Weevil, great orchards of pecans will rear their majestic heads towards the sky, as though proud of their royal lineage,

and then shall the South again blossom like the rose, and become a blue-domed, sun-kissed, moon-bathed dream of beauty, and her purse filled with honest gold given in exchange for the queen of all nuts, the pecan.

We have a natural monopoly in the production of this splendid nut, but to make the most of our God-given opportunity requires money, brains, and everlasting bull dog determination.

Legumes are nature's wonder workers, the magician's wand which allows the farmer to take from his land and still leave it richer than before. By their systematic use our orchards will become like trees planted beside the rivers of water which bring forth their fruit in their season, a source of perennial pleasure and never ending profit, like the widow's barrel of meal and cruse of oil. While this is true, it is also true that the continual growing and removal of legume crops from the land will deplete the supply of potash, lime and phosphorus. Lime and phosphorus are comparatively cheap, and I have been told that cultivation will liberate nature's store of potash and make it available for the growing crops. Of course, we all understand that the better plan is to feed the legumes to live stock and return the resulting manure to the land, but oftentimes the conditions surrounding the pecan grower prevent this.

NORTHERN NUT GROWERS ASSOCIATION

Dr. W. C. Deming, Secretary

I said recently in my Journal notes that a colored elevator boy had told me of a bearing pecan tree at Rockville, Ct.; that the said boy was from Georgia and knew pecans, and that he had picked some of the pecans from the tree this year. Some of you, who know colored boys as well as I ought to, must have smiled at my credulity.

Impatience would not permit my waiting for the boy to fetch me the promised fruiting branch. I journeyed to Rockville, found the house described—and a small ailanthus, which the colored house tenants told me some one had said looked like a pecan tree!

I said nothing to the elevator boy, but waited. Two days ago he told me that he had been out to get the pecans for me and found that the colored man who had lived in the house had moved and taken the pecan tree with him!

The nut that, at the outset of my nut growing career, seemed most immediately promising, the chestnut, came to prompt disaster from the blight. I gave up all hope for it. Now, after all, it is the chestnut that is giving me best crops.

For two years the chinkapin bushes that I brought from Maryland in the fall of 1919 have borne full crops of their little bright, sweet round nuts entirely free from weevils. For two years my Japanese chestnuts, in spite of occasional cutting back in the past by the blight, have borne good crops. Last year the nuts were nearly all infested with weevils. This year I have found none so far.

Last year one tree of the Chinese chestnuts, *C. mollissima*, bore a double handful of nuts. This year the same tree and two others have borne in proportion. I have not found a weevil, the nuts are larger than the American chestnut, very handsome and very good quality. The trees are seven or eight years old. One or two have blighted but most of them are healthy. They seem to me of great promise.

The Van Fleet hybrid chinkapins, five years old, have fruited abundantly this year for the first time. One has a very small burr with a fair sized, dark brown, single round nut. The other has a large prickly burr, like the chestnut, with a long, light brown nut, sometimes with three in a burr, though oftenest single.

I see in my mind's eye a large orchard of Chinese chestnut trees with hybrid chinkapins between and the glad owner marketing large crops at about forty cents a pound.

The Kirtland shagbarks mature early, weeks before the Griffin can be husked. I think the best of the nuts are considerably larger than those from the parent tree, which is, I believe, the experience with other grafted hickories that have borne. The husks on nuts of my two bearing topworked Kirtland shagbarks are strikingly different in appearance. One is bright green and the other deeply russeted. Before they ripened I thought that I must have made a mistake in the labelling.

Several varieties of filbert have borne this year. One of my Gillet first generation seedlings, probably from a Barcelona, bears the largest nut that I have seen. Dr. Morris says that it is also of good quality. The Rush hazel is the most productive of any that have fruited for me so far. It is large

for an American hazel, thin shelled, plump kernel and good quality. Alongside the chestnut orchard I see, in fancy, one of filberts, reproducing the same enchanting features. I have no longer any hesitation in recommending the planting of the filbert, to anyone who will give it good care. But I would give the same advice to anyone contemplating a crop of children. I don't give my filberts any care, but they are pretty good. I might say the same for any children.

Conventions are wonderful to renew one's faith and enthusiasm. To see a lot of people of affairs who are willing to leave them for several days, spend considerable money, and sleep and eat far from home, for a sentimental matter like that of nut culture in the East, is to make one gloriously glad to belong to such a devoted band. Our children will make the money from growing nuts and write about the altruism of their fathers.

The Association is now a member of the American Pomological Society, in accordance with a vote at the convention. Their next convention will be at Council Bluffs, Nov. 15 to 17. We should have delegates there. This convention will be during the Mid-West Horticultural Exposition at the same place, Nov. 13 to 18. "Our" Mr. S. W. Snyder is superintendent of "Department B—Nuts." It offers \$181.50 in cash premiums for nuts. I hope that the editor will have room to reproduce the list of premiums, 83 classes including four for persimmons. I suggest for next year the pawpaw also.

Thus do these quiet men quietly steal ahead of us talkers and scribblers. The Snyder Brothers, both of whom are members of our association, will make splendid delegates, but the more the better. All the Iowa members should be there and those of the adjoining states. You could have a little convention of your own and form a Mid-West Nut Growers' Association, in affiliation with the Northern Nut Growers' Association.

W. C. DEMING.

Filberts in Oregon

The Oregon grower, Salem, Ore., says: Interest in filbert planting continues. John A. Thornburg, president of the Forest Grove National bank, announces his intention to plant 40 acres in his hop ranch near Hillsboro this fall. He has ordered 3000 Barcelona, 300 DuChilly and 100 White Aveline

trees. This is about the proper proportion to obtain best pollination. The DuChilly variety pollinates the Barcelona, which is the leading commercial variety of the state. The White Aveline, Daviana, English Cob, Clackamas, etc., are used to pollinate the DuChilly.

The Oregon Agricultural College is investigating the whole matter of filbert pollination, but has not announced final results of its work yet. It may take a year or more to complete experiments under way.

The filbert is the youngest member of the horticultural family in Oregon, but is now past the crawling stage. It has one advantage in Oregon at least in that it is rain proof and unaffected by frost damage. The filbert blooms during the dead of winter. It will not stand wet feet, heavy soil or shallow dry locations.

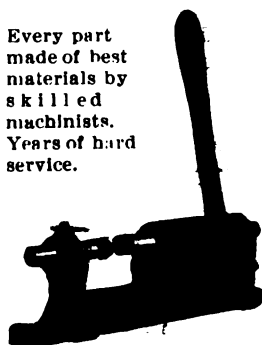
The First Ten Years

By A. S. Perry, Cuthbert, Ga.

A pecan orchard is an expensive proposition at best for the first eight or ten years, and no doubt all of us have puzzled our brains in trying to devise an efficient yet economical system of orchard management. I frankly confess that this question has brought me to my wit's end more than once. These first years with all going out and nothing coming in, is the great bug-bear of our industry that has scared away many good men. The high cost of orchard maintenance is the Banquo's Ghost that must be laid before we can interest the small landowner in pecan growing. I do not claim to have solved the problem, but I am convinced that the average pecan grower's salvation for the first ten years lies in the crops grown between the trees. There are two classes of crops that are grown in a pecan orchard. First, those that rob the soil of moisture, humus, and fertility, and leave it poorer than it was the year before. Second, those that leave the land richer than it ever was before, that return humus to the soil and fill it with nitrogen, that priceless gift of nature. It seems foolish to ask an intelligent audience of the National Nut Growers Association "which of these crops will you plant?" But we can all profit by studying this question.

If it relates to nut culture it should be in the AMERICAN NUT JOURNAL. Please send it in.

Every part made of best materials by skilled machinists. Years of hard service.



The SIMONS PECAN CRACKER

A Wonderful Improvement

Adjustable to crack all sizes of pecans without breaking the kernels. Powerful, Fast, Durable, Economical.

Prices promptly on request

Southland Pecan Co.
Columbus, Ga.

List Your Wants And Offerings In
THE OFFICIAL JOURNAL

Every Month To Every State In The Union

AMERICAN NUT JOURNAL
ROCHESTER, NEW YORK

Digitized by Google

The American Nut Trade: Market and Crop Reports

PERSIAN WALNUT

Season's Walnut Prices

Completely upsetting Roger Babson's opinion that the new tariff bill will increase the cost of living 10 per cent, the California Walnut Growers Association October 3rd named opening prices which reflect a decrease of fully 10 per cent over last year's price.

The opening prices for this year are as follows: Number Ones, 22½c; Number Twos, 17½c; Fancy Budded, 26c. Last year's closing price for Number Ones was 27c. The market opened at 24½c but only stood at that point for a day, strengthening immediately and moving up to 27c.

According to press dispatches a few days ago, Roger Babson, well-known statistician, declared that the American people would have to suffer a 10 per cent increase in the cost of living, because of the new tariff bill.

That Mr. Babson misapplied his theory, so far as walnuts are concerned, is indicated by the following excerpt from a letter just sent out to California congressmen and senators by the California Walnut Growers Association:

"In refutation of the assertions made by interests which strongly opposed the passage of the tariff bill, to the effort that it simply will enable manufacturers and producers to impose upon the public, we have just advised the wholesale and manufacturing trade of a material reduction in the price of both unshelled and shelled walnuts. This happens just at a time when the new tariff bill gives us a 200 per cent increase in duty on shelled walnuts. We feel that you will be glad to know that the efforts you put behind the tariff schedule, which resulted in its passage, will not prove to be a boomerang to embarrass you, nor a pretext to gouge the American people."

This year's walnut crop is the heaviest since 1919. The production will not be less than 50,000,000 pounds, it is believed. The harvest is valued at from \$11,500,000.00 to \$13,000,000.00.

"The opening prices named today virtually put California Walnuts back on a pre-war basis," says General Carlyle Thorpe. "This fact is worthy of emphasis, because many other well-known food products are ranging upward in price this year. The fact should not be lost sight of that two years ago California walnuts set the pace for all other

products in the matter of price reduction, with a drop of 30 per cent and each season since 1919 a material reduction in price has been made the consumer.

"This year the world's production of walnuts is heavier than usual, and consumption must be stimulated. The Association believes that this can best be done by keeping the price at such a point that walnuts will be within the reach of all.

"The buying power of the dollar is still far below normal. This year's walnut crop was grown for somewhat less than that of last year, and the saving naturally must be reflected in a lower cost of the product.

"As for quality, the California walnut this year is plumper, whiter, and heavier than ever before. This is partly the result of heavy rains last winter and liberal irrigation during the summer, but is largely due to the fact that growers are more painstaking of late in the matter of dusting their trees to destroy aphids and other pests. This precaution leads to better size and quality.

"Buying power throughout the country is stronger now than it was a year ago. With the railroad and coal strikes settled, labor is quite generally employed, as is indicated by the fact that retailers everywhere are signifying their willingness to place orders for future needs, instead of buying from hand to mouth as they did last year, so the probability is that the 1922 walnut crop from California will move out rapidly at prices that will be satisfactory both to the producer and consumer."

Walnut Importers Enforce Standard

At a recent meeting of New York walnut importers, held under the auspices of the Dried Fruit Association of New York, it was unanimously decided to re-establish in full standards for shelled walnuts as adopted on June 25, 1912, and amended Oct. 15, 1912. The unsettled conditions produced by the war made it difficult for the shippers to conform to these standards during the past eight years, but it is felt that conditions have now again become normal, and there is no reason why the standards can not be strictly adhered to by all shippers in France.

To enforce its standards New York importers in future will decline to place contracts with shippers refusing to guarantee deliveries to be in strict conformity with the Dried Fruit Association Standard Contract of New York, and importers in placing

business on the other side will require specific assurances on this point.

Importers have furthermore decided that if during the forthcoming season they receive merchandise other than that specified in the contract, concerted action will be taken by the Dried Fruit Association of New York, as the representative of the importers, whereby letters of credit would in future be opened, available only for a part of the invoice amount, the balance being payable only after arrival and inspection of the merchandise in New York, and after approval of the goods, or in case of doubtful deliveries, after approval by the Dried Fruit Association of New York.

On the Pacific Coast

Indications point to a very heavy crop of walnuts this year. So far as can be determined at this date, says the September issue of the Oregon grower, the quality will be exceptionally good. Very little blight is reported from any district. The only factor from the production viewpoint, which still remains doubtful is the matter of size. The summer has been very dry. Growers generally, however, have anticipated this drought condition and cultivation practices have been exceptionally good.

Crop conditions in California are reported as the best in years with a record crop of high quality nuts on the trees. French and Italian conditions are also very good with double last year's crop in sight. The size is good and early maturity is promised.

The marketing problem is the reverse of 1921. A light crop of poor nuts in California, light European crop and late deliveries from the Orient made the market a very strong one during the fall months. Unsold crops in the growers' hands at harvest time were sold on a rising market. California raised above her opening price twice and Oregon shippers did likewise. This season with crop conditions exceptionally good throughout the world, with the buying inclination of the consumer in a doubtful state, with transportation facilities upset in this country, there is no prophet bold enough to proclaim a repetition of last season's success.

A meeting of walnut growers was held in the Association offices at Salem September 9, at which several vital problems were discussed such as grades, use of local markets, proportionate delivery, market conditions, explaining the policy for handling this year's crop, and other subjects.

BUDDY NUT TREES

A hybrid tree that grows 4 to 6 feet a year and produces excellent nuts three years after transplanting.

The Buddy Nut is a natural hybrid of the Japan walnut and the American butternut. Its unparalleled rapidity of growth and unusual beauty as a shade tree, together with the wonderful quality and great size of the nuts it produces indicate that this tree will become one of the most popular in America.

The only present source of supply of this remarkable tree is this Nursery.

Order yours today. Supply is limited. One tree, \$2.00; three trees, \$5.00; twelve trees, \$20.00, while they last.

Keso Nurseries, Clinton, Conn.



THE MERRIBROOKE
MELTER

EVOLUTION IN TREE GRAFTING

Almost anybody can graft almost any kind of tree at almost any time of the year by the new Morris paraffin method. Former methods of tree grafting now out of date. Paraffin method in addition offers new advance in treatment of tree wounds in general. Use the Morris method with Merribrooke Melter.

\$5.50 postpaid east of Mississippi River.

\$5.75 western United States and Canada.

TYSON BROTHERS INCORPORATED
(DISTRIBUTORS)
FLORA DALE, PA.

THE PECAN

Government Pecan Report

Under date of Sept. 15th Leon M. Estabrook, Division of Crop Estimates, U. S. Dept. Agr., reports:

Pecans will be a short crop this year according to reports of conditions on September 1, covering about two million trees, gathered by Agricultural Statisticians of the Government Crop Reporting Service.

The present condition of 27.7 per cent of normal is lower even than that of 1920 and is a marked decline from July 1 condition of 53.4. The condition a year ago was 51.2 per cent, and the five-year average 56.1. Conditions are worst in the heaviest producing states. Texas, the greatest single producer, reports only 9 per cent of a normal condition (crop promise) and Georgia, the greatest producer of the cultivated improved nuts, only 36, with Mississippi, Oklahoma, Arkansas, and Louisiana, also large producers, 39, 39, 24 and 25 respectively. Conditions are 55 per cent in Florida and Alabama, and the native wild trees of the northern portion of the pecan belt in Missouri and Illinois are still better, 65 and 60.

The poor condition is ascribed to many causes, principally frost and rain damage to the bloom, damage from later excessive rainfall in some sections and drought in others, injury to trees from case bearer, to foliage from caterpillars, heavy late shedding of nuts, etc. Many authorities say it is simply an off year; that the trees lack the vitality to produce a good crop this year following the big crop of 1921.

Georgia conditions are the best in the heaviest commercial section. In Alabama, Mississippi, and Louisiana they are better in the coastal sections than upstate. In fact, the crop in the delta lands along the Mississippi River in Mississippi and Louisiana is little better than a complete failure. The crop in the Wabash bottoms is better than in the valleys of the southwestern part of Illinois.

Missouri has a good crop along the Mississippi River south of St. Louis. Some sections in eastern Oklahoma will gather a fair crop, but generally the crop is poor with well loaded trees found only here and there.

In Arkansas weevil damage has been very heavy. In the White River territory the shed nuts almost cover the ground, and in the Red River section the trees are shedding so heavily that it is feared that the crop will hardly meet local demand.

A Native Crop Estimate

A gentleman who has occasion to keep in close touch with the pecan crop in all producing sections reported early this month that he recently visited most of the native pecan sections of Texas, Oklahoma, Arkansas, Missouri, Indiana, Illinois and Louisiana. He finds that the Government crop report on pecans in Oklahoma is pretty close to

the facts as he finds them, but that in his opinion there will be considerably more native pecans in Texas this year than the report indicates. Both his investigation and that of the Government were made as far back as in August, (the Government report being dated Sept. 1st) so that allowance must be made for changed conditions since then. His estimate is 25% of last year's crop. In Illinois it is believed that the crop will be 80% of last year's, though in these states no pecan crop is large. The western crop is a shelling crop, of course. The commercial orchard crop is for marketing in the shell principally, under normal conditions. It is a luxury crop.

In Texas last year there were no serious floods to wash away the nuts and as the cotton crop was short farmers had time to gather the nuts. It is thought that if all the pecan harvested last year in Texas were accounted for, the total would have been 550 carloads. Something over 100 carloads are expected this year.

The Pecan in California

In a letter to Secretary Deming of the Northern Nut Growers Association, Stuart B. Garbutt, Princeton, Cal., on the Sacramento river, 70 miles north of Sacramento, expressed sincere regret that he could not attend the convention of the N. N. G. A., the program of which particularly appealed to him. He has several hundred Persian walnut trees which he worked on black walnut roots, growing thriftily; also 40 to 50 large seedling pecans to work over. He says C. A. Reed, nut culturist, U. S. Dept. Agr., declares the Princeton, Cal., section natural pecan territory, but there are practically none there and the few grafted trees of Stuart and Van Deman fruit only sparingly, though seedlings are loaded. Mr. Garbutt grows pistache nuts and jujubes. He has 250 fruiting trees of the latter which in China rank as one of the four leading fruits; they are not nuts but they work in very well with nuts in California and Texas, as do persimmons in the South and in the Ohio valley.

In Southeastern U. S.

When an expression was asked at the Thomasville convention as to how many pecan growers in the Southeastern U. S. this year will have a crop equalling 25% of their last year's crop, twenty hands were raised; 40%, ten hands; 60%, six hands. Mr. Whetstone said he would have 75% at least.

Pecan Grove Set Out

Blue Mountain Miss, Oct. 4—A pecan grove of ten acres has been set out near Dumas by Dr. W. H. Anderson of Booneville. Pecans have been profitable in this county.

If it relates to nut culture it should be in the AMERICAN NUT JOURNAL. Please send it in.

ORDER YOUR PECAN SHIPPING CASES
NOW SO AS TO HAVE THEM
WHEN YOU NEED THEM

PAK-RITE

Corrugated Pecan Shipping Cases

Carried in stock for immediate shipment

Size	
No. 1.....	\$ 3.30 per hundred
No. 2.....	3.95 " "
No. 3.....	5.15 " "
No. 5.....	6.45 " "
No. 10.....	7.77 " "
No. 20.....	10.00 " "
No. 25.....	10.85 " "

F. o. b. Atlanta, Ga.

Orders for less than 100 of a size 50c extra.

Send us your orders

CORRUGATED PAPER PRODUCTS Inc.

ATLANTA, GEORGIA

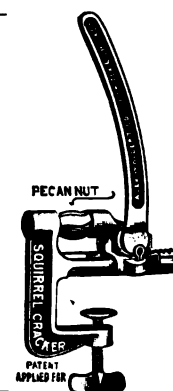
Squirrel Nut Cracker

BEST ON EARTH

Cracks the Shell but not
the Kernel.
Adapted only for table
nuts—especially Pecans.

ALEX WOLDERT CO.

SOLE DISTRIBUTORS
TYLER, TEXAS and CHICAGO, ILL.



PECAN TREES

We Grow Them Right
We Pack Them Tight
We Price Them Right

Southern Nut Tree Nurseries,
THOMASVILLE, GA.

NUTS: Pecans, hickory nuts and black walnuts, for eating and planting. Fresh from native Southern Indiana seedling trees. Quality of this year's crop good.

INDIANA NUT NURSERY

J. F. Wilkinson, Prop.

Rockport

Indiana

FOR SALE

THE W. R. STUART PECAN GROVES AND HOME. About 3 1/2 Acres of land. Intimately associated with the beginnings of the Pecan Industry. Also two tracts of excellent Pecan land, 280 and 1160 acres. For particulars write—
A. H. Shannon, Ocean Springs, Miss.

If it relates to Nut Culture it ought to be in "American Nut Journal." Please send it in.

The Logical Market Place for Sale of Nuts

The Advertising Columns of the American Nut Journal Chief Exponent of the Trade.

Hundreds of Readers of this Journal Ask for Pecan Nuts in Moderate Quantity at Prices Less Than the Retail Price per Pound in Northern Markets. They Would Be Eager Buyers if They Knew Where to Apply. If There is Any Surplus at Any Time, the Advertising Columns of this

Journal Will Dispose of It. Rate, \$2.80 per Inch. Announcement Should be Maintained the Year Around (Yearly Rate, less than 60 Cents per Inch a Week) to Secure Best Results. Make Your Name a Household Word Wherever Pecans Are Wanted. Make It Easy To Procure Them.

AMERICAN NUT JOURNAL

P. O. Box 124

ROCHESTER, N. Y.

THE PECAN

The Pecan Industry

By Martin V. Calvin, Statistician Georgia Dept. Agr.

The pecan delights in an alluvial soil, but will flourish in any soil underlaid with a permeable clay soil, for the tap root of each tree takes a deep and firm hold of mother earth.

There are seven states in which the pecan has made a fine record—Alabama, Florida, Louisiana, Mississippi, Oklahoma and Texas.

The year 1919 was a particularly favorable year to the pecan. Texas led with 16,754,000 pounds; Oklahoma was next with 4,243,000 pounds; Georgia was third with 2,545,000 pounds; Louisiana next with 2,243,000 Alabama was fifth with 1,176,000 pounds; Mississippi followed with 1,560,000 pounds; and Florida was seventh with 1,026,000 pounds.

The Georgia crop of 1920 was somewhat smaller than that of the preceding year—1,994,000 pounds. The figures given are not absolutely accurate, for the reason that the pecan growers have not yet reached a point at which they can commercialize their products as the peach growers and the truck growers have done.

Very recently, largely through the persistent and well considered efforts of Georgia's senior United States Senator, Hon. William J. Harris, an appropriation, between \$6,000 and \$10,000, was made by Congress with a view to the establishment at Albany, Ga., of a pecan demonstration farm. The selection of a center for the purpose was made by Government officials. It is a singularly happy selection; for Albany is the hub of a wheel of pecan production counties.

Within a radius of fifty-two miles of Albany, inclusive of Dougherty county, there are twenty-nine counties which annually produce 30.5 per cent of the pecan crop of the entire state. Note the fact that these counties represent less than 20 per cent of all the counties of the state. Within five years, if the farm be properly managed and the present growers do their full duty by their respective groves, the production of

pecans in Georgia will be 4,000,000 to 5,000,000 pounds a year. In addition to that, there will be small but first class pecan groves on three-fourths of the home farms in the state.

Filing Sample Pecans Systematically

Among those who are supplying an outlet for pecans of any grade is the Barry Nut Company, Atlanta, Ga., which has sent out many requests for samples of pecans. Systematic record of samples received is kept so that when there is demand for a special kind the location of that kind may be known at once. "Some growers send in samples," said Mr. Barry last month, "and because they do not hear from us at once they feel that the effort was lost. They are doing the right thing, however, for the sample is filed against the time it may indicate a needed lot. It may be six months before that time comes."

Prizes for Texas Pecans

The Erath County Pecan Growers Association, Stephenville, Tex., through its secretary, Ross R. Wolfe, announces that Texans in various parts of the state have offered cash premiums for the best native pecans with a view to propagating them, as follows:

For best native pecan, \$40; first prize for best pecan, \$25; second prize, \$10; third prize, for best collection of native pecans, \$5. Two pounds of each variety, should be sent. It costs nothing to enter the contest which closes Dec. 1, 1922. Pecans should be sent by parcel post to Secretary Wolfe, Stephenville, Tex.

The Pecan in Oklahoma

The pecan was given an important place throughout the program of the Oklahoma State Horticultural Society meeting in Stillwater Aug. 23-24. Messrs. Darden and Ringer gave an interesting demonstration of top-working native pecan trees. For the Horticultural Show of the A. and M. College, December 5-6 exhibits of leading improved varieties and seedling varieties of pecans will be procured. Liberal premiums will be offered.

Pecan Month

The Observer notes in The Montgomery Advertiser that the National Nut Growers Association, whose officers and executive committeemen are all from Alabama, Georgia, Florida and Texas are putting on an intensive campaign to make September "Pecan Month." There will be numerous community meetings in the pecan states under the auspices of appropriate agencies, such as Farm Bureaus and county agents. At these meetings papers will be read and speeches made which should stimulate popular interest in the pecan industry.

"It is significant," remarked The Advertiser, "that this organization takes its root mainly in Alabama, Georgia, Florida and Texas. It calls attention to the fact that these states enjoy a lead in the pecan industry, and that nut culture in general is not an industry which any one region of the country can monopolize. We are steadily increasing fruit and nut production in the United States. This course not only will add to the wealth of the people, but will provide in greater abundance necessary varieties in their food supplies."—Charlotte, N. C. Observer.

To a Soil-Robbing Nut Grower By A. S. Perry, Cuthbert, Ga.

I let nothing in the orchard, nor out of the orchard, interfere with the growth and development of the pecan trees; and let me urge each of you to adopt the same policy. So plan your intercrops that under no circumstances will they interfere with the pecans. No matter how promising the prospects, never hesitate to use the mower or the plow if the best interest of the trees seem to demand it.

And if I am addressing today a soil robbing nut grower, permit me to suggest, with apologies to Walt Mason: "You've got it mixed, and you are headed wrong, but I've a field for cow peas and I must jog along. Just let me say before I go that nature's laws are just and that man stands a splendid show to get in debt or bust who tries to cheat the land he tends. Go plant some clover, beans and peas, and thank the good Lord that he sends to you such splendid crops as these."

Budded and Grafted
HARDY NORTHERN NUT TREES
Best varieties, grown in natural nut soil. Send for catalog. Have your seedling nut trees topworked to these fine varieties.

Information and estimate on request.
INDIANA NUT NURSERY
Rockport, J. F. Wilkinson, Prop. Indiana

PECAN TREES

100,000 TREES—STANDARD VARIETIES
WE GROW NOTHING BUT PECAN TREES
HIGH QUALITY—SERVICE THE BEST

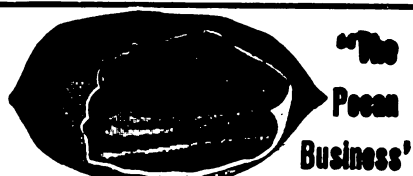
SIMPSON NURSERY CO., MONTICELLO, FLA

THIS SPACE
\$2.50 Per Month Under yearly Contract
Under less than yearly term:
\$2.80 Per Month

PECANS

We are the pioneer growers of budded and grafted pecans in the South. Have a complete stock of the leading standard varieties. Can furnish trees we know will please and give satisfactory results. Catalog free.

INTERSTATE NURSERIES
C. M. Griffing & Co. Props., Jacksonville, Fla.



NEW EDITION FREE

A practical guide showing how to bud pecans. Tells how to grow trees 12 inches in diameter by the end of the 8th year, which yielded 400 lbs. nuts per acre.

Trees, Nuts, Groves for sale direct without agent at attractive reduced prices
B. W. STONE, Thomasville, Ga.

THIS SPACE

\$60 Per Week Under Yearly Contract
Including Publication in both **AMERICAN NURSERYMAN** and **AMERICAN NURSERY TRADE BULLETIN**.
One Month: \$2.80 in both.

SUCCESS

and other leading varieties. Also citrus
BECHTEL PECAN NURSERIES
Ocean Springs, Miss.

PECAN TREES

Plant them this year! Buy direct from nursery and save agent's profit. All standard varieties; quality and service the best. Write us for prices.

FLORIDA NURSERIES

W. W. Bassett, Prop., Monticello Fla.

AMERICAN NUT JOURNAL CHIEF EXPONENT OF AMERICAN NUT INDUSTRY

Of National Circulation

Covering Every Phase of Nut Culture

Subscription: - - **\$2.00 Per Year**
Advertising: - - **\$2.80 Per Inch**

Official Journal { **National Pecan Growers Association**
Northern Nut Growers Association

AMERICAN FRUITS PUBLISHING COMPANY

39 State Street, Rochester, N. Y.

The 1922 Pecan Crop

Martin V. Calvin, Georgia Department of Agriculture, Atlanta, Ga., wrote to J. B. Wight, Pecan Convention, Thomasville, Ga., Oct. 3rd, as follows:

"I have some information as to outlook for pecan crop the current year. It occurred to me last night to hand it you through the mails by special delivery letter. If in possession of the facts, you will not need this letter; if not, it may serve you a purpose.

"You know that one can not be definitely accurate, when confronted by weather, twig girdlers, etc., in estimating crops of any kind.

"Government stands back of this information: Of date September 1, 1922:

"Covers 2,000,000 trees in bearing. Condition 27.7% compared with 51.2% in 1921. 31.0% compared with 1920. The 5-year average, 1916-1920, both inclusive, 56.1% of normal crop. In Texas, condition indicates only 9% of normal. Georgia, largest producer cultivated improved nuts, 36%.

"Mississippi, Oklahoma, Arkansas and Louisiana 39%, 36%, 24%, 25% respectively. Alabama and Florida 55% each. Missouri and Illinois 65% and 60% respectively. Georgia in best condition of all. Spring frost, rain, caterpillars, etc., responsible for damage to blooms and immature nuts.

"Many persons assert only an off-year; 1921 having given so large a crop. Georgia pecan crop 1920, 1,993,472 lbs.; 1921, 2,666,303 lbs.

T. A. Gates, Macon, Ga., offers 490 acres ten miles from Macon for pecan planting. There are more than a thousand hickory trees, 8 to 12 inches in diameter, on the land. He is too old to develop it.

MEMBERSHIP DRIVE

National Pecan Growers Association

The National Pecan Growers Association fee for membership is \$2.00 per year, with a student membership fee of \$1.00.

The subscription price for the *American Nut Journal*, official organ, is \$2.00 per year.

Note combination offer below.

REGULAR YEARLY RATES

Association Membership.....\$2.00
American Nut Journal..... 2.00

SPECIAL YEARLY RATES

Association Membership }
American Nut Journal } \$3.25

Address J. Lloyd Abbot, Sec'y.
Route 1, Spring Hill, Ala.

NATIONAL PECAN GROWERS ASSOCIATION

J. Lloyd Abbot, Secretary

The National Pecan Growers Association is in excellent condition numerically and financially as the result of active, practical work during the last year or two. Its membership should be larger and it will be as soon as present members send in the names of those they have promised to interest in the work of the Association.

Among the features of a convention program a question box has proved at times a valuable feature. Unfortunately this feature has often been side-tracked by pressure of business, much discussion and lack of time to work it in. This was true of the Mobile convention. An attempt was made to feature the question box at the Thomasville convention, but it was found that many of the questions were by those who did not attend the convention and were on topics which attendance at the convention would have answered. On account of lack of time, it was necessary for the Association to rule that the question box should be open only to those at the convention. This is an added reason why members should be present.

The banquet on the evening of the second day of the Thomasville convention provided pleasant relaxation from the formal proceedings. The arrangement committee made a happy choice in the matter of toastmaster L. A. Niven, of the *Progressive Farmer*, Birmingham, Ala., whose perpetual smile beamed stronger than ever as he selected his victims for extemporaneous speeches on subjects which had little relation to things mundane or within reason. Altogether it was an enjoyable affair.

Automobiles were at the service of the members each day of the convention for visits to points of interest. Many desired to see the large estates of Messrs. Archbald, Payne Whitney, Hanna and Mack, and all wanted to see the Parker, Stone and other well-known pecan groves. There were interesting demonstrations of spraying machines at a central point. It is realized that systematic spraying of pecan orchards as a preventive as well as a corrective measure is necessary.

Secretary Abbot may be depended upon to roll up a fine attendance at the Jacksonville convention next fall, if effective publicity will do it. He leaves no stone unturned in

this direction. His activity the past year produced marked results in the way of increased membership, as is shown in another column—a jump from 52 to 258 paid memberships, the largest membership, by more than double, in 15 years.

The official proceedings of the Thomasville convention will be in the hands of the members within the next 60 days probably. They will contain valuable papers on topics of interest to all pecan growers and should prove a strong inducement to acquire membership in the Association.

Daily trips were made during the convention from Thomasville, Ga., to Monticello, Fla., to visit the Nurseries of the Simpson Brothers, Miller & Gossard, W. W. Bassett and others. President Simpson's car was kept busy early and late. The Simpson Nursery Company has the finest pecan nursery we have seen. There are many acres of seemingly perfect stands of pecan trees in hundred thousand lots. A visit to this Nursery gives assurance that the pecan groves of the future are to have every known advantage from the start. The company has orders for a large part of its standing stock and will plant a considerable part of it in groves on its own account. On the home grounds, near the company's office stands a fine Moore pecan tree which bore 30 pounds of nuts at 7 years old, and last year, at 9 years of age bore 92 pounds. This year's crop, an off year, will be from 25 to 30 pounds. This is proof of the bearing quality of the Moore.

Walnut Shipment Seized

Victoria, B. C., Oct. 10—Prompt action by George E. Wilkerson, fruit quarantine inspector, resulted recently in the deportation of a shipment of one thousand sacks of infected walnuts brought here from Seattle by the motor vessel Wakena. The walnuts were in a badly decomposed state, and literally alive with worms, it was stated by the quarantine officer. "These walnuts originally came from Japan," said Mr. Wilkerson, "and had been in a bonded warehouse in Seattle for three years." The shipment was badly infected and crawling with worms.

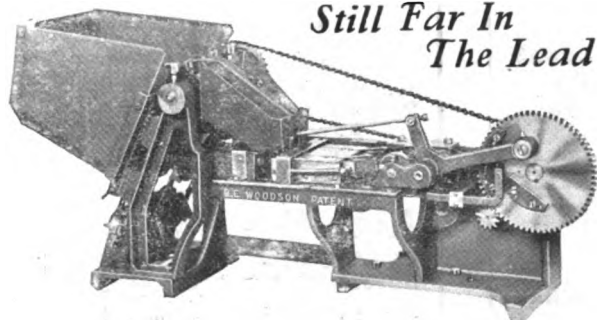
H. R. Mosnat, Chicago, Ill., is developing nut culture in Iowa and hopes to have something in the near future that will interest members of the Northern Nut Growers Association.

Chicago names her streets after presidents. Philadelphia names hers after nuts.

Just mention AMERICAN NUT JOURNAL.

The Woodson Pecan Cracking and Grading Machines

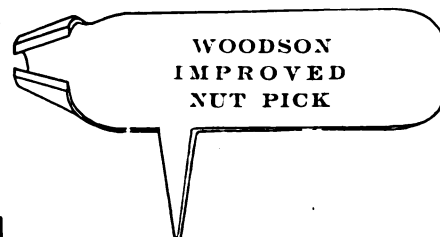
Still Far In
The Lead



I have several machines of other makes such as the "Dick B. Williams," and "Eaton," which I have taken in as part payment on WOODSON Machines. These I will sell much below their cost price.

Write for list and further particulars.

Look for the announcement of the WOODSON Power Black Walnut cracking machine.



Placing your order for later shipment will prevent you from being disappointed in delivery this Fall.

Robert E. Woodson, Inventor and Manufacturer

Office and Factory—3763 FOREST PARK BOULEVARD, ST. LOUIS MISSOURI

American Fruits Company's Library Opportunities

PRACTICAL BOOKS ON HORTICULTURE, NUT GROWING, NURSERY PRACTICE

Any of the following books will be sent on receipt of price by AMERICAN FRUITS PUB'G CO.,
123-125 Ellwanger & Barry Bldg., ROCHESTER, N. Y. Prices subject to change.

American Apple Orchard By F. A. Waugh.....	\$1.90	Insect Book—Dr. L. O. Howard.....	6.30	Parsons on the Rose—Parsons.....	1.75
American Fruit Culturist By John J. Thomas.....	3.65	Insects and Insecticides—Weed.....	2.15	Peach Culture—J. A. Fulton.....	1.65
American Fruit Farm—F. N. Thorpe	2.65	Insect Pests of Farm, Orchard and Garden—Sanderson and Pears..	4.65	Peach Growing—By H. P. Gould....	2.65
American Grape Culture—Munson..	2.65	Irrigation Farming—L. M. Wilcox...	2.40	Pear Culture for Profit—Quinn.....	1.35
American Grape Growing and Wine Making—George Husmann	2.15	Irrigation for the Orchard—Stewart	1.75	Picturesque Gardens—Henderson....	2.25
American Horticultural Manual By Budd-Hansen, two vols.....	3.15	Land Drainage—Joseph H. Jeffrey..	2.15	Plant Breeding—By Dr. L. H. Bailey	3.40
American Peach Orchard—Waugh..	1.90	Landscape Gardening—Art of Land- scape Architecture—Parsons....	3.65	Plant Propagation; Greenhouse and Nursery Practice—M. G. Kains..	2.40
Bulbs and Tuberous-Rooted Plants..	2.15	Landscape Gardening—Downing's Famous Work—10th Edition— Revised by Waugh.....	6.00	Plant Physiology—B. M. Duggar....	3.00
Bush Fruits—By F. W. Card.....	3.15	Landscape Gardening—House and Garden's Book of Gardens, 9 1/2 x 12 1/2, 400 Illustrations.....	5.15	Pomology, Text-book of—Gourley...	2.75
California Fruits and How to Grow Them—E. J. Wickson, A. M.....	4.15	Landscape Gardening Kemp—Re- vised by F. A. Waugh.....	2.15	Practical Forestry—A. S. Fuller....	2.15
Citrus Fruits—J. E. Coit.....	3.40	Landscape Gardening—Maynard....	2.65	Practical Fruit Grower—Maynard...	1.00
Commercial Apple Industry of North America	3.65	Landscape Gardening—The Small Place—By Elsa Rehmann.....	3.65	Principles of Agriculture—Bailey...	2.00
Cyclopedia of Agriculture By E. V. Wilcox-C. B. Smith....	3.75	Landscape Gardening—Cridland....	2.65	Productive Orchard—F. C. Sears..	2.65
Dwarf Fruit Trees—Waugh.....	1.00	Landscape Gardening—The Com- plete Garden—Albert D. Taylor..	6.15	Principles of Fruit Growing—Bailey	2.65
Farm Bureau Movement—O. M. Kile	2.15	Landscape Gardening—O. C. Simonds	6.15	Principles of Pruning—Kains.....	2.65
Fertilizers and Crops By Dr. L. L. Van Slyke.....	3.40	Manual American Grape Growing— Hedrick	3.40	Pruning Manual—By L. H. Bailey...	2.65
Fertilizers—Edward B. Voorhees...	2.65	Making Horticulture Pay—Kains...	1.90	Putnam's Garden Hand Book.....	2.00
Field Notes on Apple Culture By Dr. L. H. Bailey.....	.90	Manual of Fruit Diseases—L. R. Hessler, H. H. Whetzel.....	3.15	Quince Culture—W. W. Meech.....	1.35
First Principles of Soil Fertility By Alfred Vivian.....	1.50	Manual of Fruit Insects—M. V. Slingerland, C. R. Crosby.....	3.90	Roses—How to Grow—Robert Pyle..	1.35
Forcing Book—By Dr. L. H. Bailey..	2.15	Manual of Gardening—L. H. Bailey..	3.40	Rose—H. B. Ellwanger.....	1.40
Fruit Growing in Arid Regions....	2.75	Manual of Tree Diseases—Rankin...	3.40	Sales Promotion By Mail.....	2.15
Fruit Garden—P. Barry.....	2.15	Manual of Vegetable Garden Insects By Crosby & Leonard.....	2.90	Small Fruit Culturist—A. S. Fuller..	1.75
Fruit Harvesting, Marketing—Waugh	1.90	Manures and Fertilizers—Wheeler..	2.65	Soils—E. W. Hilgard.....	4.25
Fruit Insects—Crosby.....	3.90	Modern Fruit Marketing—Brown....	1.90	Soils—Lyon-Flippin-Buckman	3.40
Fumigation Methods	1.90	Modern Propagation Tree Fruits— B. S. Brown.....	1.65	Soils—F. H. King.....	2.40
Gardening for Pleasure—Henderson..	2.15	Nature's Garden—Neltje Blanchan..	6.30	Soils—By Charles W. Burkett.....	1.90
Gardening for Profit—Henderson....	2.15	Nursery Manual—Dr. L. H. Bailey...	2.65	Spraying Crops—C. M. Weed.....	1.00
Grape Growers Guide—Chorlton....	1.65	Natural Style Landscaping—Waugh	2.65	Standard Cyclopedia of Horticulture Edited by L. H. Bailey. In six vol- umes. 3,600 pages. 4,000 text engravings. 96 sepia halftones. 500 collaborators. May be had on installment payments.....	40.00
Grape Culturist—A. S. Fuller.....	2.15	Manual Tropical and Sub-tropical Fruits—Popenoe	3.90	Strawberry in North America—S. W. Fletcher	1.90
Greenhouse Construction—Taft.....	2.40	Nut Culturist—Andrew S. Fuller....	2.15	Strawberry Growing—S. W. Fletcher	2.40
Greenhouse Management—Taft.....	2.40	Nut Growing: Latest Information; Guide to Propagating—By Rob- ert T. Morris.....	2.65	Success in the Suburbs—John R. Mc- Mahon	2.15
Hedges, Windbreaks, Shelters.....	1.00	Ornamental Gardening—E. A. Long..	2.15	Successful Fruit Culture—Maynard	1.75
How To Grow Roses—Robert Pyle..	1.35	Principles of Floriculture.....	3.40	Surgeon's Philosophy—Dr. R. T. Morris	3.15
Injurious Insects—F. L. Washburn..	2.65			Systematic Pomology—Waugh.....	1.90
Insects of Economic Importance— Herrick	2.15			Ten Acres Enough—I. P. Roberts...	1.75

A paper which gives the best value for the money to the reader will give the best value to the advertiser as well. I don't think there is any argument about the soundness of this view.—H. Dumont, Chicalo, Ill., in Printer's Ink.

WANTED Names and Addresses of Owners of Groves of Native Nut Trees in Northern States.

In the interest of Northern Nut Culture this Journal desires the above information to serve as a basis for extension of Nut Culture.

Readers will confer a favor by sending us lists of names and addresses of those who have stands of nut trees on their property, (with some account of productivity if practicable). Black walnut, English walnut, butternut, hickory, chestnut, filbert, etc.

American Nut Journal P.O. Box 124 Rochester, N. Y.

BUDDED and GRAFTED Nut Trees

Start right with my hardy Pennsylvania grown trees and be assured of success.

Attractive Catalogue Free.

I have this season a fine lot of stake trained Pecan, English Walnut, Black Walnut and Persimmon trees budded on root pruned transplanted stocks, that will please you and that will transplant easily and safely. Write for catalogue.

J. F. JONES, The Nut Specialist
LANCASTER, PA.

THIS SPACE
\$2.50 Per Month Under Yearly Contract
Under less than yearly term:
\$2.80 Per Month

GRAFTED PECAN TREES
ALSO BUDDED ROSES and SATSUMAS
We Solicit Your Inquiries
Carol Plantation Nurseries,
THEODORE, ALA.

WANTED
BACK NUMBERS OF THE
AMERICAN NUT JOURNAL
Will pay 50c each for a copy of numbers 2, 3 and 4 of Volume 1.
Address X, care this journal.

CONSULTING TROPICAL HORTICULTURIST and TREE EXPERT

HARVEY C. STILES

COLUMBIA, TEXAS

Specializing in Pecans, Grapefruit, Avocados, and Landscape Development. Long experienced expert for—and present active director of—many such large projects throughout tropics and semi-tropics. Examinations, Reports, Plans, Specifications and Estimates. Correspondence suggested.

Have You Nuts to Sell?

HICKORY NUTS BLACK WALNUTS
BUTTERNUTS CHESTNUTS

Hundreds of buyers are asking where the nuts can be obtained in quantity. Place your Sale Advertisement in the AMERICAN NUT JOURNAL for quick returns. \$2.80 per inch.

39 State St., Rochester, N. Y.

American Nut Journal

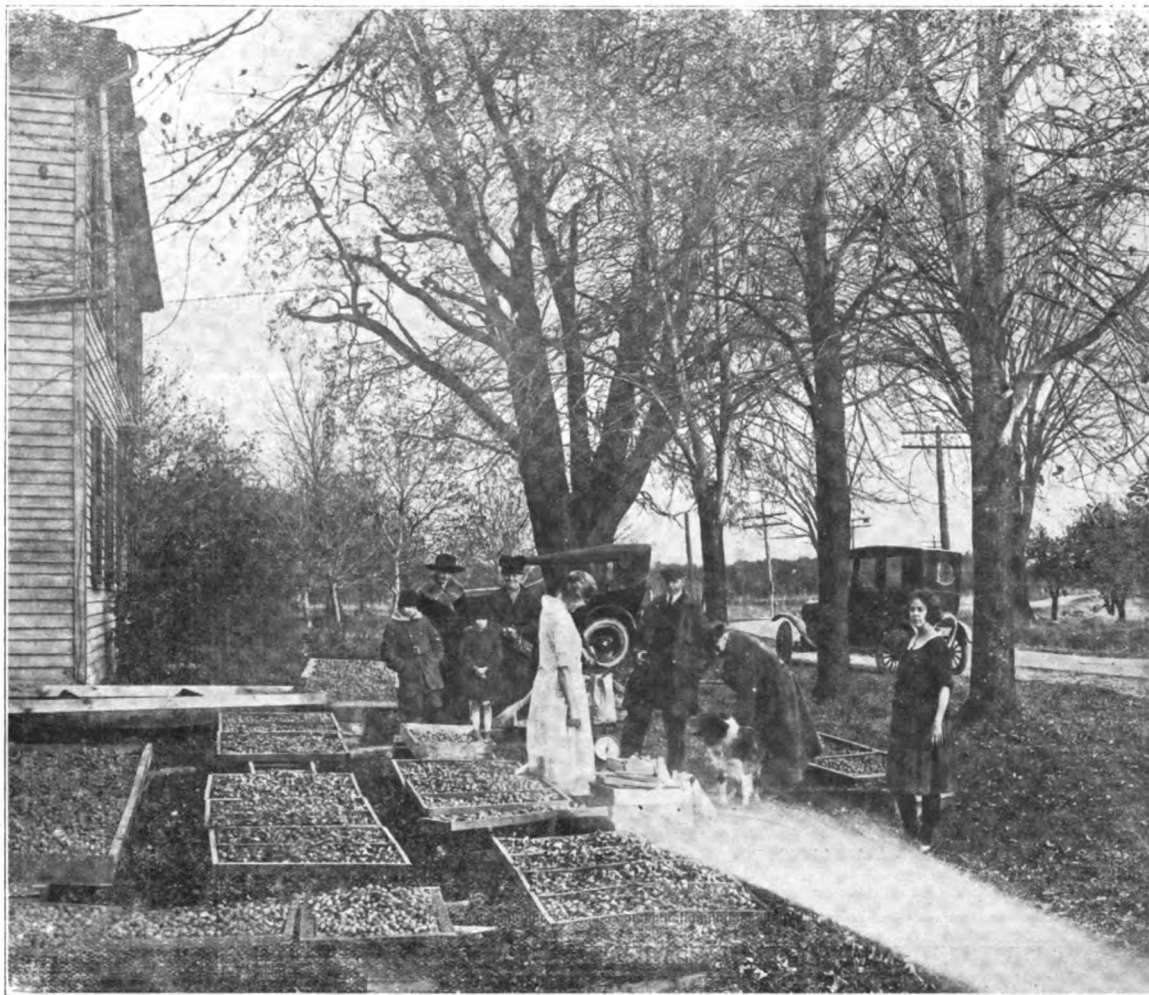
**DEVOTED TO NUT GROWING INTERESTS
GENERALLY THROUGHOUT THE AMERICAS**

Vol. XVII, No. 5

NOVEMBER, 1922

Per Copy 20c.

Commercial English Walnut Orcharding In The East



SCENE AT THE POMEROY ENGLISH WALNUT FARMS—LOCKPORT, N. Y.
Marketing 6000 Pounds of Nuts from an 8-acre Grove, Fall 1922—Mr s. Pomeroy in White.

39 STATE ST.



ROCHESTER, N. Y.

American Fruits Publishing Co.

Line-Up of National Pecan Growers Association Members

In Annual Convention at Thomasville, Georgia, October 1922

Name	Address	Acres Owned or Managed	Average Age of Trees	What Horticultural Inter-Crops	Greatest Number of Pounds of Nuts in Any One Year
J. B. Demaree.....	Thomasville, Ga.				
C. S. Parker.....	Thomasville, Ga.				
L. M. H. Whetstone.....	Autaugaville, Ala.	60	15	Peaches	11,000
P. M. Hodgson.....	Stockton, Ala.	40	14	Cow peas	12,000
J. B. Wight.....	Cairo, Ga.	175	14	V. Beans, corn, etc.	38,000
W. W. Bassett.....	Monticello, Fla.	40	8	V. Beans, C. Peas	
T. Kiyono.....	R. D. 2, Crichton, Ala.	40	9	Velvet Beans	1,200
E. C. Butterfield.....	Winona, Tex.	1000	11	Peach	10,000
S. E. Washburn.....	Bolling, Ala.	300	7	Peach	
V. T. Gilliam.....	St. Louis, Mo.	0			
A. D. Galt.....	Albany, Ga.	1800	7	Velvet Beans	3,400
Henry Johnson.....	Albany, Ga.	20	5	Velvet Beans	19,500
A. M. Wynne.....	Leesburg, Ga.	180	12		
W. G. Vestal, Jr.....	Albany, Ga.	1800	8	Cow peas	66,000
A. C. Cowan.....	Albany, Ga.	500	7	Cow peas	
J. A. Kernodle.....	Camphill, Ala.	60	9		9,000
Citronelle, N. & O. Company.....	Citronelle, Ala.	160	6	Soy Beans	1,000
E. E. Maciejewski.....	Monticello, Fla.	30	6	Cow Peas	400
E. E. Atkinson.....	Monticello, Fla.	300			
Fred Williams.....	Leesburg, Ga.				
K. K. Moran.....	Leesburg, Ga., R. 5....				
W. E. Rouse.....	Valdosta, Ga.	100	10		
W. M. Van Cise.....	Albany, Ga.	650	1-3	Peaches in 175 A.	
C. A. & R. C. Simpson.....	Monticello, Fla.	1000	1	Peaches	
H. K. Miller.....	Monticello, Fla.	250	10	Satsuma	18,000
H. A. Gossard.....	Wooster, Ohio				
H. L. Watson.....	Monticello, Fla.	500	14		5,000
P. D. Wyckoff.....	Putney, Ga.				
D. E. Tuck.....	Thomasville, Ga.				
Frank Cornfield.....	Concord, N. C.	12	10	Peas	
A. N. Tuck.....	Thomasville, Ga.				
W. J. Parker.....	Thomasville, Ga.	100	10		1,500
J. E. Kerr.....	Valdosta, Ga.				
W. P. Bullard.....	President National Pecan Exchange				
J. M. Jones.....	Fort Valley, Ga.				
J. I. Warner.....	Lovick, Ala.	60	15		
J. S. McMillan.....	Ft. Valley, Ga.				
W. C. Lassetter.....	Birmingham, Ala.			Editor Progressive Farmer	
W. H. Leonard.....	Thomasville, Ga.	30	8		1,700
L. J. Knox.....	Calvert, Ala.	60	2	Beans and Peas	
C. H. Mathus.....	Fort Valley, Ga.				
R. B. Small.....	Macon, Ga.	1800	7	Various	10,000
J. M. Patterson.....	Putney, Ga.	5500	11	Beans and Peas	600,000
W. A. Brockhurst.....	Yonkers, N. Y.	40	2 to 6	Corn and Beans	
H. A. Mathews.....	Fort Valley, Ga.	30	4 to 11	Peaches	500
A. D. Williams.....	Yatesville, Ga.	100	1	Peaches and Peas	
Mrs. L. C. Shackelford.....	Kinderlout, Ga.	27	12	Pecans	1,200
W. C. Jones.....	Cairo, Ga.	50	11	Corn, V. Beans	1,100
Preston B. Seanor.....	Fitzgerald, Ga.	500	24	Peas, V. Beans	
				Water Beans	6,500
Clayton Jay.....	Fitzgerald, Ga.	60	2	V. Beans and Corn	
W. H. Harris.....	Fort Valley, Ga.	100	2-15	Peaches	14,000
Dr. W. A. Warren.....	E. Tallassee, Ala.	50	15	None	No record
R. L. Odom.....	Toledo, Texas.	200	1 to 16	None	2,000
C. E. Pratt.....	Wiggins, Miss.	800	2 to 12	Beans and Peas	3,000
M. J. Keyes.....	Cordele, Ga.	4106	15-6	Peanuts and Corn	26,000
H. H. Simmons.....	Jacksonville, Fla.	200		Corn, Oats	
		150	2-17	V. Beans, Watermelons	8,000
Ralph T. Olcott.....	Rochester, N. Y.			Editor American Nut Journal	
C. J. Hayden.....	Albany, Ga.			Hort.—L. & N. R. R....	
E. J. Hoddy.....	Knoxville, Tenn.			Hort.—L. & N. R. R....	
Fred Williams.....	Leesburg, Ga., R. 5....				
Fred A. Spier.....	Washington, D. C.	20	8		324
G. G. Glower.....	Thomasville, Ga.	250	10		
C. E. Compston.....	Mobile, Ala.	42	8		

(Continued on page 71)

YOUR BUSINESS ANNOUNCEMENT

Can be kept standing in the columns of the Official Journal the year around at a cost of less than 60 cents a week! Write for particulars.

AMERICAN NUT JOURNAL, Rochester, N. Y.

Dispose of your PECANS to the best advantage
Get in touch with responsible dealers before selling.

We buy seedlings
and fancy stock.



Small shipments
or carloads.

Write or wire for our cash prices.

R. E. FUNSTEN COMPANY, ST. LOUIS, MO.

A NEW BOOK!

NUT GROWING

By Robert T. Morris

The latest and only up to date book on the newest and one of the most important branches of Horticulture, giving a broad survey of a rapidly growing industry. Detailed explanation of successful methods of propagation and the new process of grafting with the use of paraffin; illustrated.

An invaluable work for all nut growers.

Price, \$2.65, Postpaid

AMERICAN FRUITS PUB'G. COMPANY
39 State Street, Rochester, N. Y.

AMERICAN NUT JOURNAL --- NOVEMBER, 1922

EDITORIAL DEPARTMENT—Communications on any subject connected with Nut Growing and Distribution are cordially invited by the editor; also articles on this subject. We shall be pleased to reproduce photographs of trees of interest, methods and scenes connected with the Nut Industry; portraits of individuals, etc. Suggestions are cordially welcomed.

ADVERTISING—Advertising forms close on the 10th of each month. If proofs are wanted, copy should be in hand on the 1st.

Advertising rate: 20 cents per agate line; \$2.80 per column inch for any amount of space.

Advertisements that do not represent reliable concerns will not be accepted.

SUBSCRIPTIONS—The "American Nut Journal" will be sent to any address in the United States for \$2.00 a year; to Canada or abroad for \$2.50 a year. Three years: In United States, \$5.00; Canada, \$6.50.

Add ten cents for exchange unless bank draft, express or postal money order is used.

WHAT THIS JOURNAL STANDS FOR—Reliable information on all phases of the Nut Industry. It is for the advancement of Nut Growing in general; it is in no way confined to the interest of a particular kind of nuts, nor of a particular section. It is broad in scope and absolutely independent. The aim of "The American Nut Journal" is to stimulate thousands of persons into developing interest in one of the greatest food supplies of the future—to line the roadsides and fill the waste places with trees of a sort which yield dollars worth of fruit every year instead of the mere bunches of leaves resulting from present shade and ornamental planting. At the same time it will record the progress of the industry, the latest descriptions in the note book of the biologist and plant physiologist, the rapidly expanding knowledge of methods, the increasing acreage, and in short the news as it develops of an industry whose importance is recognized by an increasing number of persons in all sections.

Entered as second-class mail matter June 6, 1914, at the post office at Rochester, N. Y., under the Act of March 3, 1879.

AMERICAN FRUITS PUBLISHING COMPANY, Inc.

Ralph T. Olcott, Editor and Manager

121-123-125 Ellwanger & Barry Bldg., Rochester, N. Y.

Classified Business Announcements In This Issue.

Alexander Woldert Co.....	"Squirel" Nut Cracker.....	69	Logical Market Place.....	For Selling Nuts.....	69
Banning, H. M.....	"Pecan Villa" for Sale.....	67	Macheca & Co., A. M.....	Pecan Brokers.....	67
Bassett, W. W.....	Pecan Trees.....	70	Northern Nuts.....	Sources Wanted.....	72
Bechtel's Pecan Nurseries...	Grafted Pecan Trees.....	70	"Nut Growing".....	New Book.....	58
Burkett, J. H.....	Special Announcement.....	70	Nut Information.....	Special Topics.....	59
California Ranch.....	Pecan Trees for Sale.....	69	Nuts as Staple Food.....	Dr. J. H. Kellogg.....	59
Carol Plantation Nurseries...	Grafted Pecan Trees.....	72	"Nut Trees for the North"...	Expert Advice.....	59
Corrugated Paper Products	Pecan Shipping Cases.....	69	Ohio Pecan Confection Co...	Paper-Shell Pecans Wanted.....	67
Florida Nurseries.....	Pecan Trees.....	70	Simpson Nursery Co.....	High Grade Pecan Trees.....	70
Funsten Company, R. E.....	Pecans, All Kinds, Wanted.....	58	Southern Nut Tree Nurseries	Pecan Trees.....	69
Griffing & Company, C. M...	Pecan Trees.....	70	Stiles, Harvey C.....	Tree Expert.....	72
Indiana Nut Nursery.....	Northern Pecan Trees.....	70	Stone, B. W.....	Pecan Trees, Nuts, Groves.....	70
Indiana Nut Nursery.....	Northern Pecan Nuts,—Hickory...	69	Texas Pecan Nursery.....	Budded Pecan Trees.....	63
Inter-State Nurseries.....	Pioneer Pecan Growers.....	70	Wanted.....	Names of Grove Owners.....	72
Jones, J. F.....	Grafted Pecan Trees.....	72	Wilkinson, J. F.....	Grafted Pecan Trees.....	70
Lancaster Nut Nurseries...	Northern Nut Trees.....	72	Woodruff, A. W.....	Texas Pecan Land for Sale.....	67

IMPORTS OF NUTS INTO THE UNITED STATES, FOR CONSUMPTION, DURING THE LAST THIRTEEN YEARS

(Compiled by Bureau of Commerce and Navigation, Department of Commerce, Especially for the "American Nut Journal.")

KIND	1909	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919	1920	1921
Almonds—not shelled.....lbs	2,120,632	6,810,056	3,762,654	5,242,543	2,363,960	5,501,059	4,684,594	2,368,369	4,901,168	6,149,374	7,482,538	6,460,732	5,068,215
Shelled.....lbs	8,538,061	10,495,750	12,160,646	11,692,968	12,655,057	13,896,621	12,168,153	13,210,668	19,160,258	21,444,757	28,007,908	18,769,626	21,572,634
Apricots and peach kernels lbs.		27,854	13,531	7,939	18,769	18,572	67,164	11,926	250,075			65,175	32,608
Coconuts in the shell.....Dollars	\$1,246,463	\$1,298,970	\$1,704,262	\$2,012,203	\$1,793,713	\$2,150,500	\$1,593,686	\$1,891,328	\$2,583,560	\$2,490,368	\$4,053,282	\$4,230,221	\$2,288,000
Coconut Meat broken or Copra not shredded, dessicated or prepared.....lbs	23,742,518	20,830,539	38,081,984	61,505,787	34,283,092	44,459,158	89,680,382	108,507,765	247,043,127	430,649,332	236,637,781	215,188,461	186,820,900
Dessicated, shredded, cut or similarly prepared.....lbs	5,461,602	5,985,306	6,661,850	5,396,465	6,626,095	9,307,924	5,866,806	7,947,380	10,491,706	20,269,909	29,637,674	30,631,020	35,633,497
Cream and Brazil.....bu	409,644	461,496	277,679	a21,601,008	a11,843,139	a11,431,531	a21,483,319	a12,489,217	a16,230,023	a11,282,088	a43,076,338	a13,935,436	a37,102,046
Filberts—not shelled.....lbs	7,365,837	10,026,961	10,084,987	8,375,890	8,596,278	10,36,072	10,922,248	10,003,552	16,468,547	7,432,524	16,747,349	14,865,364	14,092,338
Shelled.....lbs	1,384,689	1,413,391	2,332,606	1,368,835	1,450,620	1,798,147	1,722,705	1,259,540	2,280,787	4,245,863	3,778,906	4,711,293	4,233,167
Marrons, crude.....lbs	10,270,398	9,968,879	14,845,345	10,157,321	18,849,257	12,549,959	15,754,796	6,275,030			5,021,146	29,484,637	23,340,968
Olive nuts, ground.....Dollars	\$580	\$478	\$236	\$206	\$312	\$385	\$25	\$112	\$420			\$132	\$180
Palm and Palm Nut Kernels ..	\$2,752	\$6,907	\$5,744	\$7,970	\$4,872	a23,127	a31,900	a1,104,885	a626,435	a16,905,318	a5,610,056	a8,329,034	a230,194
Peanuts or Ground Beans.....lbs	7,326,371	11,297,172	11,055,823	12,660,433	12,140,612	17,298,778	14,075,387	9,623,411	7,710,082	1,970,797	5,667,354	7,222,486	4,803,677
Shelled.....lbs	1,302,919	16,089,919	7,821,505	3,127,829	7,823,173	21,819,101	11,695,507	19,739,888	27,548,928	67,746,831	24,179,687	103,552,486	39,406,863
Pecans.....lbs	1,480,289	3,349,460	2,333,037	2,607,227	1,803,434	2,621,161	2,032,539	1,265,882	4,076,943			2,194,620	1,062,300
Walnuts—not shelled.....lbs	17,432,885	23,269,974	21,146,116	22,208,845	16,363,046	16,131,211	20,988,326	22,640,418	17,177,992	3,304,003	21,235,078	17,339,096	31,821,639
Shelled.....lbs	8,781,908	10,960,988	11,244,034	10,713,286	10,093,622	11,636,053	10,552,936	13,445,790	12,257,583	9,707,401	10,560,809	13,972,917	13,204,068
All other shelled or unshelled, not specially listed.....lbs	9,938,337	3,584,544	2,962,663	3,050,989	3,600,056	7,426,313	3,272,492	2,772,589	2,769,634			3,763,973	3,890,676
Total of nuts imported.....Dollars	\$8,549,997	\$12,775,196	\$14,265,572	\$15,626,485	\$13,508,307	\$19,815,713	\$16,865,244	\$20,594,434	\$33,697,686	\$49,930,283	\$57,490,009	\$86,752,801	\$37,378,572

a—pounds.

Nut Culture Information

Reprint folders on topic discussed in American Nut Journal. 10 Cents Each

Grafting and Budding the Walnut—U. S. Dept. Agriculture.
 Pecan Areas of the United States—W. P. Reed.
 Walnut Trees For New England—Dr. Robert T. Morris.
 Some Walnut Varieties—Dr. L. D. Batchelor.
 Chip Buds For Nut Trees—Charles L. Edwards.
 Grafting, Budding, Topworking—Dr. W. C. Deming.
 Breeding Chestnuts for Disease Control—U. S. Dept. Agr.
 Advent of Nuts as Staple Food—Dr. J. H. Kellogg.
 Underworking Nut Trees—Charles L. Edwards.
 The Ubiquitous Black Walnut—T. P. Littlepage.
 Average Yield of Pecan Orchard in S. W. Georgia.
 Value of Nuts As Food—Dr. W. C. Deming.
 Improved Black Walnut a Good Investment—Henry Stabler.
 Status of Pecan Industry—C. A. Reed, U. S. Nut Culturist.
 Sources of Supply of Hazel Nuts—Bulletin Imperial Institute.
 Top-Grafting the Walnut Tree—Ferd Groner.
 Black Walnut As a Meat Producer—Henry Stabler.

Outline of Northern Nut Culture Activity—Dr. W. C. Deming.
 Establishing the Filbert Grove—George Dorris.
 Top-Working Northern Pecan Trees—J. F. Wilkinson.
 Nut Trees for Highways and Public Places—W. S. Linton.
 American Nut Culture—24-page Pamphlet Survey.
 East Texans Reap Fortunes on Pecans.
 Hazel Blight—Dr. Robert T. Morris.
 American Nut Industry—C. A. Reed, Nut Culturist.
 What Nuts to Plant in Northern States.
 Pecan Rosette; Practical Treatment—W. A. Weaver.
 English Walnut: Where To Plant It.
 Nut Tree Grafting by an Easy Method—Dr. Robert T. Morris.
 Purchase of Chestnut Tree With Reference to Blight—G. F. Gravatt.
 Quick Results in Pollenizing Pecans—E. E. Rislen.
 Nut Trees to Reduce Food Costs—Chas. Lathrop Pack.
 How To Guard Against Faulty Nuts—Harvey C. Stiles.
 The Romance of the Pinon Nut Industry in New Mexico
 Soil Fertility; Fertilizer Problems in Pecan Culture—J. J. Skinner,
 U. S. Department Agriculture.
 The Future of the American Grown Filbert—Richard H. Turk.

AMERICAN FRUITS PUBLISHING CO., 39 State Street, Rochester, N. Y.

FOR THE EXPANSION OF NORTHERN NUT CULTURE

Campaign for Greater Membership Mapped Out by Secretary Deming Based on Suggestions by President McGlennon at the Rochester Convention—State Vice-Presidents are Asked to Initiate Organization of State Branches of the Association—District Branches Also—Illustrated Lectures, Exhibits and Circular Matter.

At the 13th annual convention of the Northern Nut Growers' Association, held at Rochester, N. Y., Sept. 7-9, 1922, the president, in his address, urged the need of more members if the association is to do the work it should do. As a result there were two animated discussions in which a number of methods of increasing membership were proposed. The recommendations of the president's address were referred to a special committee, to report before the close of the convention; but the program was so full that the committee found no time to meet. It now presents this report to the executive committee for its action.

Report of Committee

1. A systematic campaign through organized co-operation with our state vice-presidents.

Your committee submits a copy of a letter to be sent to all state vice-presidents; also to all other members, since all the possibilities for activity are not by any means limited to the list of vice-presidents.

LETTER TO STATE VICE-PRESIDENTS

To the State Vice-Presidents of the Northern Nut Growers' Association and all Members of the Association:

At the 13th annual convention of the Northern Nut Growers' Association, held at Rochester, N. Y., Sept. 7-9, 1922, in a discussion on means for enlarging the membership of the association and its sphere of work, a member said that the list of vice-presidents for the different states was printed in the report from year to year, and, he supposed, was never changed. The secretary replied that the list was changed every year in the hope of eventually finding a vice-president that would work, but that so far the quest had been unsuccessful. He promised, however, that he would write them a quickening letter, if he could. This is the letter. It embodies the ideas on the subject of enlarging the membership of the association brought out in animated discussions at the convention.

At the very beginning the president offered to guarantee a hundred new members in the coming year if each member present would promise to get ten, or turn the money equivalent into the treasury. Ten members responded, thus making two hundred new members, or their money equivalent, promised for this year on the president's initiative act alone. Now the secretary wishes to ask each of the state vice-presidents, or any member who would like to be a state vice-president, to put himself in the place of the members who made these promises—and some of them were new members who had never before attended a meeting—and pledge himself to do the same that they have, namely, to get ten new members, or their monetary equivalent, during the coming year. The president says we must have a thousand members at the time of the next convention. We have 250, and two hundred more pledged; we need, therefore, 550 more.

The secretary makes the following sug-

gestions, gathered from the discussions at the convention, for increasing our membership and influence.

SUBSIDIARY ASSOCIATIONS

(a) There should be subsidiary associations, or societies, branches of this association, in every state, or perhaps in groups of states that have similar conditions. Such associations should hold an annual meeting at the time of their state, or interstate fair and make their exhibits at the fairs where great numbers of people would see them. Copies of the *American Nut Journal* and Dr. Morris's book could be on sale, association literature distributed and memberships solicited. Many interesting possibilities will suggest themselves. The secretary can supply lists of nut growers and "prospects" in any of the northeastern states to any member who will undertake to try to interest them in a local association.

TALKS AND ARTICLES

(b) Those who can give talks before agricultural or horticultural societies or clubs, garden, bird or game clubs, granges, schools and similar institutions, should do so, on the subject of nut growing, and not be afraid to show why anybody who wishes to promote that industry should join the Northern Nut Growers Association. Prof. Corbett of the U. S. Dept. of Agriculture has promised to let us have a set of slides on nut growing from the great collection of the Department for use in lectures by any member of the association. Application for these slides should be made to the secretary.

(c) Any one of us can write little articles on nut growing for the local press. Some of us could write magazine articles with illustrations. These are often well paid for. Any one who feels diffident about accepting pay can turn it over to the association which is not diffident.

NUT TREES FOR NEW MEMBERS

(d) Mr. Jones has offered to give a seedling nut tree grown from selected nuts to each new member up to 500. This includes packing and mailing. Can we not make Mr. Jones realize the magnitude of his offer and use up all of those 500 trees? They include seedlings of the Stabler black walnut, of the Mayette English walnut and of specially selected Chinese walnuts. I believe that Mr. Jones could be induced to furnish some of these trees for planting on school grounds or in public places if they could be taken care of. Mrs. Ellwanger also has offered some black walnut seedling trees and it will perhaps be possible, through ex-president Linton, to get some seedlings, or nuts, of the black walnut trees at Mount Vernon, the home of Washington. In this way, and by giving talks to teachers and school children, or other associations in connection with the plantings, people can be interested. And with all of this the idea of more memberships must not be forgotten.

PRIZE FOR BOY SCOUT

(e) Dr. Morris offers ten years' subscription to the *American Nut Journal*, and membership in the association to any boy scout

who will win it as a prize. The conditions of winning the prize have not yet been formulated.

(f) Other suggestions made at the convention may be briefly noted.

INTERESTING THE WOMEN

1. Interesting more women in nut growing and the association. This has been made the subject of a special letter of which a copy is enclosed.

AN ASSOCIATION NURSERY

2. Establishing a Nursery for the dissemination of nut trees as premiums, for experiment or trial. This is a thing that we can keep in the backs of our heads for a while. At present our own nut Nurserymen are supplying all needs.

NUT TREES ON ROADSIDES

3. Encouraging the planting of nut trees on the roadsides, in public places and as memorials. This was the chief subject of discussion at Lancaster in 1921 and members should read over the report of that meeting. A special committee was appointed for action but apparently has been too busy to attend to business. It is to be hoped that the incandescent activity of the state vice-presidents, after getting this letter, will so light up the inactivity of this committee that it will be stimulated into work by the actinic rays.

LITERATURE AND CHRISTMAS GIFTS

4. Distributing the *American Nut Journal* to educational institutions of agriculture and horticulture. A Maecenas might do this, along with a copy of Dr. Morris's book on Nut Growing, but at present no other way is apparent.

5. Interesting chambers of commerce in nut growing—by those who know their habits.

6. Making Christmas gifts of a membership in the association with subscription to the *Journal*. The only requirement is this reminder and \$3.25 to spare for humanity.

7. Applying the principles of salesmanship in getting members; "selling" memberships.

8. Circularizing state colleges, societies, experiment stations. This job can readily be unloaded on the secretary—with the money to do it.

9. Getting horticultural societies to become members, as the American Pomological Society does. Another job for the secretary.

10. Enlisting the interest of bird, game and other clubs. Every member can think about this.

11. Indexing, binding and distributing at a nominal price our surplus annual reports. The secretary may be able to accomplish this, with the encouragement and support of the members.

12. Vice-presidents and members are asked to take the report of the last Lancaster convention and read Dean Watt's address on page 80. In it he offers the facilities of the Pennsylvania Agricultural Station to carry out suggestions of our association and asks that the association make out a suggestive

Commercial English Walnut Orchard In The East

The commercial orchard of English walnuts owned by A. C. Pomeroy, English Walnut Farms, Lockport, N. Y., is of special interest to the nut growers of the Northern states because it is the only one of considerable size in the country, aside from those on the Pacific coast, which has proved successful. The only other orchard of the kind, of considerable size, the Adelbert Thomson orchard at East Avon, N. Y., after thirty years has borne but one crop of any consequence and is now in an almost abandoned condition.

Sixteen years ago Mr. Pomeroy planted the eight-acre grove under discussion. The trees are seedlings of the seven large English walnut trees resulting from nuts obtained by Mr. Pomeroy's father in Philadelphia in 1876, the interesting story of which has been published in the *Journal*. The seven trees are standing near Mr. Pomeroy's house. Some of them are shown in the illustration on the cover of this issue. These trees have borne regularly and well for nearly four decades. They are bearing yet. The nuts are not large but they are quite uniform in size and the kernels are light in

programme for the agricultural college of the states.

1000 MEMBERS IN SIGHT

What can I do to arouse the sense of obligation of the state vice-presidents and other members to the association? If you would each add only one more member that would increase the membership by two hundred and fifty. Can't you each get one more member? Make it two and we shall have nearly the thousand that the president asks for.

Won't you look over the suggestions and see if you cannot organize a state society, give some talks, write some articles, get some teachers, schools or clubs interested, or work out some plan of your own? Can't you come to Washington next year, Sept. 26, 27 and 28 and talk it over with the rest of us? If you just can't come, will you write the secretary a long letter and tell him what you think about him and our aims and deeds?

The Pennsylvania Department of Forestry last year distributed free 2,962,089 young forest trees. They were given to 1,091 owners of land in that state. It was the second largest annual distribution of forest trees in the history of the department.

color and of excellent flavor. There is marked absence of astringency. Except in size these walnuts compare well with the best that California produces. The quality of the kernel is regarded by experts as equal to the best of the imported walnuts. C. A. Reed, U. S. nut culturist, has pronounced the Pomeroy walnut of high quality, though a seedling.

We have sampled this year's crop of walnuts from the eight-acre commercial grove and find the nuts in every way as good as those of the parent trees. When English walnuts of this character can be grown on the shore of Lake Ontario in Western New York, at the 43d parallel, thriving in severe cold of winter and extreme heat in summer, certainly there is encouragement to plant orchards of English walnuts at least under similar conditions in the same latitude or below it.

On November 7th, this year, Mr. Pomeroy paused in his harvesting and marketing to say in answer to queries by a representative of the *Journal*:

"This fall my English walnut trees yielded 170 bushels of nuts. That includes the crop from the parent trees near my house and the orchard of about eight acres, but not the nuts from the small grove planted in memory of my father. A bushel of walnuts will weigh nearly forty pounds when gathered. In ten days or two weeks' time, when they have seasoned, the weight will be about thirty-six pounds.

"The eight-acre grove is now 16 years old. The best yield from any one tree in this orchard was slightly less than two bushels. Several other trees in the same grove yielded nearly as well.

"Our market was on our lawn. Some pleasant afternoons about 300 pounds of nuts would be weighed out and sold. The price was 40 cents a pound. Our customers, many of them, have been coming for years.

"The old, original trees, near my house, produced from four to eight bushels per tree.

"The tree growing on a neighbor's farm (the one the two men spent nearly \$1000 in surveying, each one claiming ownership) produced four bushels this fall.

"Thus far we have had no insect pests or any kind of disease. Consequently we have not been obliged to spray. You notice I say 'insect pests.' Crows are a great pest. It took the crows many years to find that

these nuts could be easily cracked and that nut meats were far better food than anything else. Now they come in large flocks and we have not been able to shoot a single one. If any reader of *American Nut Journal* knows of some way to keep these thieves away from my nut groves, I would be grateful to learn the remedy. Of course, I do not know the number of pounds of nuts taken by the crows, but I do know they took a lot of them.'

Speaking in detail regarding this commercial orchard, Mr. Pomeroy said this month:

"The English walnut trees in my 16-year-old grove (I do not think there are quite eight acres in this grove) are planted 40 feet apart.

Some of the trees in this grove began bearing seven or eight years ago. Every year has shown a substantial gain in yield of nuts, except last year. In May 1921 we had two severe freezes, which ruined our nut crop for that year. We have kept no record of the amount of nuts gathered each year.

"We have given the orchard clean cultivation. Never used any kind of fertilizer. Only pruned enough to allow a team of horses or a tractor to pass under the branches. When the grove was planted, peach trees were used as fillers. We have, nearly every year, intercropped with some cultivated crop, corn, potatoes, tomatoes and melons.

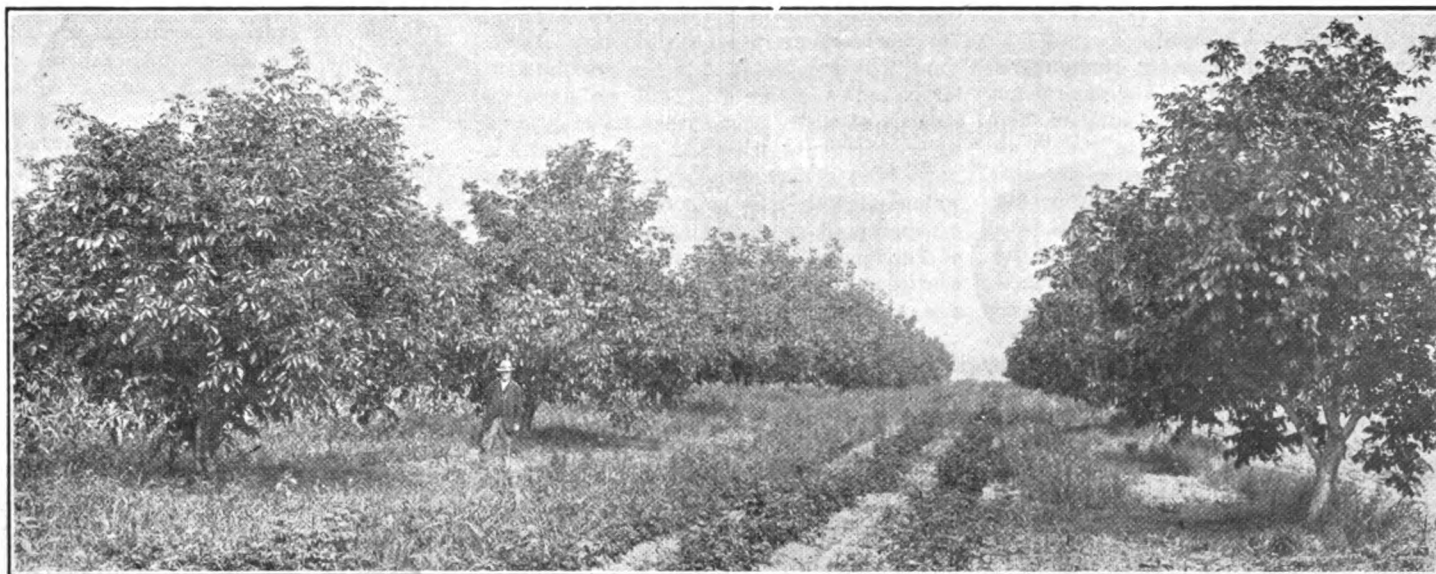
"The trees that were used to plant this grove were grown from nuts from all seven of the original trees planted by my father. The small trees were grown in nursery row and transplanted when three or four feet high.

"Never supplied water to the trees or never gave them any kind of protection in the most severe winters.

"We have never considered wholesaling as the demand for the nuts far exceeds the supply. Sometime it will be necessary to wholesale; think there will be no trouble in obtaining a fancy price.

"The trees are from 20 to 25 feet in height and about that in spread. The trunks are about 8 to 10 inches in diameter."

In the report on the yield of the Pomeroy English Walnut Farms, Lockport, N. Y., in October issue of the *Journal*, the word "bushels" should have been "pounds."



POMEROY ENGLISH WALNUT ORCHARD, LOCKPORT, N. Y.

NORTHERN NUT GROWERS ANXIOUS TO PROGRESS

Editor American Nut Journal:

There is nothing that I like better than to discuss the possibilities of the Northern Nut Growers. Of course when we say northern nut growers, it means and covers a wide space of territory, where there is a vast variety of different climatic and soil conditions to be considered.

I cannot see that the Northern Nut Growers Association is making more than a little progress—and I do not think they ever will unless they change their methods or systems in this matter.

It seems to me that the logical thing to do is to divide the territory of the Northern Nut Growers Association to zones, and then tell us just what we can do in each particular zone. There is no use trying to tell a man out in Iowa he can do the same thing a man is doing in Delaware or Maryland—it can't be done. And then don't give us something just to experiment with, but give us something that we know will be a success—and a financial success, too—in each particular locality. Unless the Northern Nut Growers Association can give us this information, it will always flounder about on a restless sea, and nothing much will ever become of its purpose or endeavor.

I believe the Northern Nut Growers Association has a great and noble purpose in this work; but I think its methods are open to much criticism. So let us try and straighten it out, and set our house in order.

We can raise the finest English walnuts in the world in certain sections of the North; also filberts and chestnuts—no doubt, other kinds of good and profitable nuts, also. And to our great advantage we have the markets almost at our door.

I do not agree with the Northern Nut Growers Association that the pecan is such a great prospect for northern culture. For, as I understand it, the pecan business has never been taken very seriously in the pecan belt of southern Indiana and Illinois. Besides, we are handicapped here in the North with short seasons and climatic conditions which will not produce the fine large paper-shall pecans of the South. So why not let them have the pecan business to themselves, and we will only attempt what is good and practical here in our sphere. After all, the pecan belt of the South is comparatively close when considered with California and the Pacific Coast where the English walnut is extensively produced.

CHAS. O. HENNINGER.

707 Terrace Ave., Indianapolis.

Editor American Nut Journal:

I have read with interest Mr. Henninger's letter and can appreciate his desire for definite information for I had similar feelings as to what the Association should do when I became a member seven years ago. Had I put my feelings in letter form it would have read much like Mr. Henninger's. As to the desirability of the points that he makes I most heartily concur. Unfortunately it is not possible at the present time to give as definite directions regarding all nuts and sections as I believe Mr. Henninger desires although we can do a whole lot more than we could when the Association was founded, and our ability in this line is increasing every year.

To attempt to do this at the present time in the case of all nuts and all sections is something I would not want to do and I believe it is something that those members of the Association best posted would not want

to do. If there is any man living who can do this correctly I should certainly like to make his acquaintance.

AS TO CLIMATIC CONDITIONS

Where we have definite experience in one section we can, with reasonable certainty, draw conclusions as to what can be done in another section with similar soil and climatic conditions. I have, at considerable trouble and expense, gathered climatological records of the entire United States for ten years back, and, in the case of those nuts where we have a pretty definite idea of climatic requirements, can give an idea as to the probability (considering climatic conditions alone) as to the success of most nuts in a given section. I have thought of calculating the constants for each weather bureau station in the United States and plotting a map but the magnitude of the task has so far prevented its being undertaken, and then it would not take soil conditions into account. I have preferred to get prospective planters to fill out a nut survey blank, which, when properly filled out, with the help of climatological records, enables me to get a very definite idea as to what can be attempted with fair prospects of success. I have been at somewhat a loss as to what to recommend in places in the mountains of Colorado, Arizona and New Mexico, in northern Maine and Canada but in most sections there are some nuts that may be planted with reasonable confidence, but as to the financial returns that may be expected we have only a glimpse although that is a rosy one.

THE NORTHERN PECAN

I agree with Mr. Henninger that the area of profitable northern pecan culture is much more confined than is the case with most other northern nuts, and I believe that black walnuts, hickories, hazels, etc., will be found to be profitable over wide areas where the pecan will not. The fact that the pecan never has been taken very seriously in the pecan belt of southern Indiana is, however, no evidence that it will not become important commercially there. It was not taken very seriously in more southern sections until Col. Stuart and others took good cotton land, planted it to fine pecans, and demonstrated what could be done and so started the southern pecan industry of today.

PERSIAN WALNUT FROM EUROPE

The Persian or English is another nut restricted as to sections where its culture is likely to be profitable. It requires conditions just opposite from the pecan. The winters must not be too cold and apparently the summers must not be too hot. These conditions are best met in the proximity of large bodies of water. Still we have instances of where apple trees have suffered severe winter injuries and Persian walnuts have been almost uninjured. The Persian walnut planter must be somewhat of an experimenter in most sections. The varieties of Persian walnuts that we have are all of European origin or from European sources and are descendants of trees growing in the comparatively equable climate of western Europe.

PERSIAN WALNUT FROM CHINA

The Persian walnut, however, while seemingly not native in China, has been growing there for centuries in sections subject to as severe changes of temperature as are found in the northeastern United States. From the vicinity of Pekin and Tientsin I have seen Persian walnuts about as fine as the fine varieties we have from California. Nuts

from northern China have been imported into the United States by the Dept. of Agriculture and by others. From these nuts we have thousands of seedlings growing where they will be allowed to fruit. It is hoped that from this Chinese stock varieties will be developed that will enable fine varieties of the Persian walnut to be grown over a wider area than is now seemingly possible.

RESULTS ACCOMPLISHED

While the planter of northern nut trees must be more of an experimenter than the planter of apple trees, northern nut culture is not in as experimental a state as it was when the Association was founded, for we have real evidence as to what can be done in some sections. Mr. E. A. Riehl in Alton, Illinois was bold enough many years ago to set out chestnut trees and top work black walnut seedlings to the best variety then obtainable, the Thomas. Now he has shown us that the fine chestnuts that he has originated are one of the most profitable crops in those sections of the country where the chestnut is not native and where it will grow. His feeling as to the promise of the black walnut is about on a par with the chestnut. In Mr. Henninger's section, around Indianapolis, I should think that the black walnut would be a success and a financial success too. I have had occasion to spend considerable time there and never saw any chestnut trees but the chestnut is native in some sections of Indiana. If it is not native around Indianapolis, I feel certain that chestnut planting would be a pronounced financial success, particularly on the lighter soils. Chestnuts bear young and prolifically.

I wish we had equally definite data on the other nuts in which the Association is interested, the hickory, hazel, Japan walnut, butternut, etc., but as yet no one else has been bold enough to plant orchards that are old enough to come into bearing, excepting Conard Vollertsen with the hazel. He has succeeded in getting the European hazel to fruit well while previous attempts in the East heretofore have not met with much success.

EXPERIMENTAL ORCHARDS USEFUL

Observations on the experimental orchards that we have are throwing light on these various matters. For example, the principal reasons why plantings of European hazels before Mr. Vollertsen's have generally been rather unsuccessful are being solved by observations. Apparently, lack of pollination is one of the principal reasons. A study of the various varieties will show which should be grown together to effect proper pollination and we now have some data on that point.

Questions as to the time of bearing of various trees are being gradually solved and it is being found that nut trees are not as slow as they were thought to be. I have an Olcott butternut set out last spring now 18 inches high, which is showing both staminate and pistillate flowers. This tree is apparently four years old from the time the nut was planted. It would be hard to equal this with apples. A number of Persian walnut trees not quite three feet high are showing pistillate bloom at this writing and a row of 12 Lancaster heartnut trees now three to four feet high set out in the fall of 1919, bore a few nuts in 1921 and were full of bloom this year.

PASSING OUT OF PIONEER STAGE

I feel that we have enough evidence so

that, while the prospective planter of nut trees has not the accumulated evidence that the fruit tree planter has, he is not in the dark as he was some years ago, and while the nut tree planter must experiment a little he is very far from being a pioneer today as Mr. Riehl was.

In an answer to inquirers some little time ago Secretary Deming noted that when people wrote him wanting more definite information about varieties, yields, etc., than he could supply regarding nuts, he suggested planting apple trees for it was possible in practically every locality for a person to see for himself just what could be done with the various varieties. The editor of the *American Nut Journal* briefly commented something like this:

"Apples for assured commercial profits in many cases; nuts for speculative planting. How many would have advised the purchase of kodak or Ford automobile stock in the early days?" The nut tree planter must be one of vision.

WILLARD G. BIXBY.

Baldwin, New York,
May 16, 1922.

Peaches With Pecans

H. T. McIntosh, writing from Albany, Ga., to the Atlanta Constitution, declares that leading horticulturists of Southern Georgia have carefully thought out a plan to interplant pecan orchards with peach trees at the start, in order to get crop returns from the land before the pecan trees reach commercial bearing age. He says:

A pecan orchard must be six or seven years old before it can be expected to bear nuts in sufficient quantity to represent the beginning of dividends on the investment. A few nuts come earlier, but it is the six or seven-year-old orchard that may reasonably be expected to produce a commercial crop, and every year thereafter the yield becomes larger.

The pecan trees are placed so far apart that there is ample room between the rows for field crops or other trees. Practically all groves are cultivated while the young pecan trees in them are getting their growth, and the nut trees are benefited as the result of such cultivation.

By placing peaches with pecans, it is believed that the cost of establishing a pecan grove can be paid out of revenues coming from the peach trees. The latter will begin bearing the second year after planting, and will produce a profitable crop the third year. The trees will be in their prime in succeeding seasons, and by the time they shall have outlived their usefulness the pecans will be in full bearing, producing increasingly valuable crops. By this time the nut trees will require the full strength of the soil about them, and the peach trees, having passed their prime, can be cut out after having paid the cost of the whole enterprise.

In the opinion of some of the most successful pecan growers, intercropping pecan orchards is detrimental to the pecan trees. They say that the pecan tree needs a monopoly of space and attention from the outset; that the young pecan tree, years before it bears—and indeed from the day it is planted—needs undivided attention; that successful growing of pecans is a business in itself and that establishing combination orchards is another thing.

What have our readers to say on the proposition to interplant pecans and peaches?

The Atlanta Constitution article says:

There have recently been purchased in the immediate vicinity of Albany, in both Dougherty and Lee counties, tracts which will be planted next fall to peaches and pecans.

Peaches come into bearing here about ten days earlier than in the middle Georgia peach belt, and it has been demonstrated that no finer peaches can be grown anywhere than in Dougherty, Lee, Worth and other southwest Georgia counties.

THE SOUTH'S LARGEST AND MOST DEPENDABLE PECAN NURSERY

Over Half Million Pecan Trees Growing.
64 Acres in Nursery Alone.



Buy the best rooted, budded Paper Shell Pecan trees **FROM THE LARGEST EXCLUSIVE PECAN NURSERY WEST OF THE MISSISSIPPI RIVER AND ONE OF THE LARGEST IN THE SOUTH.** 90 to 100 per cent of our Pecan trees live. Will the trees you have been buying do this?

A good lateral root system like we grow, and like is shown on the left side of picture is the life and making of a pecan tree, and they must have these roots if you grow them successfully.

You can buy our well rooted pecan trees just as cheap, and in many cases cheaper direct from us than you can get the trees like are shown on the right of this picture from other nurseries or their agents.

We dig them well, pack well, and get them to you in first class condition.



The Root System We Grow

The Kind of Roots Most Others Grow

Haven't you been buying trees with roots like the ones shown on right side of picture that didn't have scarcely any side roots? Did they give good satisfaction? 90 to 100 per cent of our trees live and grow on account of the wonderful lateral or side root system they have which enables them to reach out in all directions from 24 to 36 inches and gather all the necessary plant food and moisture. Our trees will be worth three times more to you than the poorly rooted trees that are grown by 90 per cent of the pecan nurseries.

TEXAS PECAN NURSERY

ARP, SMITH CO., TEXAS R. W. FAIR, Manager.

We Sell by Mail Only and Save You the Middle Man's Profit.
If you are interested in pecan growing write for our 32-page **FREE** booklet on "How to Grow Paper Shell Pecans."
Send in your order at once so you can get the sizes and varieties you want.

PEACH TREES—Write to Fair's Peach Nursery, if you want peach trees in any size lots. The trees are fine and the prices right. Large orders especially solicited.

Here's the Plan

The Belton, Texas, Journal says

"Out in San Saba county they are making a go of a big pecan growing and marketing company. San Saba county is a big pecan country, growing one third of all pecans produced in the greatest pecan growing state in the Union. There is no easier place to grow the finest pecans than Bell county. We see them growing wild on all the river banks. They will grow on the uplands also. In an average season an acre of pecans will make several times the money an acre of cotton will.

Why not get together on a proposition such as this, citizens? A great pecan producing and marketing company for Bell county. There is one nut marketing concern in the north that has grown in a few short years from \$3200 capital to \$11,000,000, and forty per cent of its products are pecans. We are right here where we can prepare the nuts for sale and market them at a minimum cost, yet we sit back and let the enterprising Yankee make the money, just as we let the New Englander spin our cotton into yarn and make cloth of it when we could do

it all ourselves cheaper than he can. We can form a stock company as large as we need to market the pecans; have a plant manned with efficient labor to sort and pack the pecans; add cracking machines and sell the product ready for use, as the big packeries up north do. Or if possible, we should launch a company big enough to buy land suitable for growing the nuts, plant paper shell pecans in available spaces on it where there are at present no trees, and use grafting and budding methods of producing larger and better pecans on trees already on the property. At the same time have a large plant in which to prepare the pecans for sale; sell them in the shell, cracked, and packed in jars in 'nut sundae' form as the California walnut growers market their products. This business is bound to be successful; it is a big money producer in California, where thousands of walnut growers are leagued in a great marketing association, and it is successful up north where the Texas nut is prepared for sale by concerns that would be at a disadvantage to use in case we should wake up to our opportunity.

American Nut Journal

COVERING NUT CULTURE

NORTH—SOUTH—EAST—WEST

AMERICAN FRUITS PUBLISHING CO., INC.
80 State Street - - - Rochester, N. Y.

RALPH T. OLCOTT, Editor and Manager
Official Journal Northern Nut Growers' Assn
Official Journal National Nut Growers' Assn

SUBSCRIPTION RATES

One Year, in advance.....\$2.00
Canada and Abroad..... 2.50
Single Copy20

ADVERTISING RATE

Per column inch.....\$2.80
Forms Close 10th of each month

ROCHESTER, N. Y. NOV. 1922

NUT ASSOCIATIONS

California Almond Growers' Exchange—
President, G. W. Pierce; manager, T. C. Tucker, 311 California St., San Francisco.

California Walnut Growers' Association—
President, C. C. Teague; secretary, W. T. Webber; manager, C. Thorpe, 1326 East Seventh St., Los Angeles, Cal.

Georgia-Florida Pecan Growers Association—
President, J. M. Patterson, Putney, Ga.; vice-pres., A. C. Snedeker, Blackshear, Ga.; sec'y-treas., J. S. Wight, Cairo, Ga.

National Pecan Growers Association—
Pres., Charles A. Simpson, Monticello, Fla.; vice-pres., J. M. Patterson, Putney, Ga.; and E. C. Butterfield, Winona, Tex.; secy., J. Lloyd Abbot, Spring Hill, Ala.; treas., J. Slater Wight, Cairo, Ga. 1923 meeting, Jacksonville, Fla., Oct. 2-4, 1923.

National Pecan Growers' Exchange—
President and manager, William P. Bullard, Albany, Ga.; vice-pres., J. B. Wight; secy-treas., A. D. Galt.

Northern Nut Growers' Association—
President, James S. McGlennon, Rochester, N. Y.; vice-pres., J. F. Jones, Lancaster, Pa.; treas., Willard G. Bixby, 32 Grand Ave., Baldwin, N. Y.; secy., Dr. W. C. Deming, Georgetown, Conn. 1923 convention, Washington, D. C., Sept. 26-28

Southeast Georgia Pecan Association—
President, Dr. W. H. Born; vice-pres., Col. G. H. Harris; secy, J. H. Girardeau, McRae, Ga.; treas., E. F. McRae.

Texas Pecan Growers' Association—
President, H. G. Lucas, Brownwood; vice-pres., John P. Lee, San Angelo; Secretary, Oscar Gray, Waxahachie.

Western Nut Growers' Association—
President, Ferd Groner, Hillsboro, Ore.; secy-treas., C. E. Schuster, Corvallis, Ore.

There is no horticultural service we can render to the future that will be more valuable than the planting and caring for and helping to fill the world with the finest varieties of pecans, walnuts and hickories.—J. R. Moseley.

J. M. D. McGregor, formerly chairman of the school board of Mt. Vernon, Ga., is planning on planting by the school children of his town, walnuts from the George Washington Estate at Mt. Vernon on the Potomac, Va., as was done in Saginaw and other points in Michigan.

PECANS, ALMONDS AND WALNUTS

Approximate Acreage, 1919—U. S. Dept. Agr.				
State	Total	Pecans	Almonds	Walnuts
Cal.	90,739	332	47,695	42,712
Tex.	74,842	74,760	55	27
Ga.	54,960	54,954		6
Okla.	25,450	25,450		
Ala.	21,832	21,702	28	102
Other ...	75,548	69,345	329	5,874
U. S.	343,371	246,543	48,107	48,721

If it relates to nut culture it should be in the AMERICAN NUT JOURNAL. Please send it in.

NORTHERN ASSOCIATION ACTIVITIES

Secretary Deming has been busy since the Rochester convention of the Northern Nut Growers Association following up the leads thrown out at that time.

As the Association is now a member of the American Pomological Society, it should have delegates at the annual meeting of the A. P. S., in Council Bluffs, Iowa, Nov. 15-17, 1922. To that end Secretary Deming has sent formal notice of appointment of delegates as follows:

S. W. Snyder, Center Point, Iowa, Superintendent Department B—Nuts, chairman; Wisconsin, Dr. G. W. Patchen, Manitowoc; Illinois, E. A. Riehl, Godfrey, Route 2; Indiana, W. C. Reed, Vincennes; Michigan, Hon. W. S. Linton, Saginaw; Ohio, Harry R. Weber, 123 E. 6th St., Cincinnati; Missouri, P. C. Stark, Louisiana; Nebraska, Dr. W. A. Thomas, Lincoln; Kansas, James Sharpe, Council Grove.

Alternates—Robert B. Lang, Racine, Box 103; Benj. Buckman, Farmingdale; J. F. Wilkinson, Rockport; Dr. J. H. Kellogg, Battle Creek; J. H. Dayton, Painesville; Josiah J. Hazen, Neosho; William Caha, Wahoo; Dr. Clyde Gray, Horton.

Secretary Deming has said to each of the delegates and alternates: "It is suggested that this occasion would be a good one for the Mid-west members to get together and form the Mid-West Branch of the Northern Nut Growers' Association.

"All delegates should send to the Iowa State Horticultural Society for a copy of the official premium list in which under the Department of nuts, S. W. Snyder, superintendent, premiums amounting to \$181.50 are offered for 79 different entries of nuts and four of persimmons."

In another column is the report of the committee appointed to consider the recommendation by President McGlennon for increasing the membership and usefulness of the Association. That committee is composed of Secretary Deming, Dr. Robert T. Morris, J. M. Patterson, J. F. Jones and John Rick.

Secretary Deming has drafted a tentative report for the consideration of the other members of the committee. This report is of such a comprehensive nature that it is probable it will elicit few additions or changes. It shows at once the able mind which has been at the steering wheel of the Association from its inception—a secretary whose far-seeing eye continually encompasses the possibilities of the field and the needs of the Association and whose active mind has elaborated upon the many excellent suggestions made in the course of long discussion at the Rochester convention. It is greatly to be regretted that with the machinery the little band of Northern Association members commands, there should be lack of funds to develop what is right before us.

The American Nut Journal in its last issue proposed a Fund to provide the needed means for development. The proposition thus far has not elicited a single comment, though it had the earnest indorsement of the president of the Association.

Meantime, work is progressing, under handicap, largely through the tireless energy of President McGlennon and Secretary Deming.

In addition to the portion of the report on the president's suggestions in his annual address, as presented on another page, Secretary Deming has drafted a report in detail on the president's suggestion regarding women members; on his suggestion that

the interest and co-operation of school teachers be enlisted, and on other suggestions by the president.

The Secretary has also submitted an elaboration of suggestions made generally at the convention for the advancement of nut culture in the Northern states. And on top of all this he has addressed a two-page, closely-written letter to the executive committee.

NORTHERN NUT FUND

When financial returns for investment in commercial nut orcharding in the Northern States are easily in sight, a fund for developing the industry will inevitably be provided. If in no other way it will come in a large membership of an Association devoted to the development of the industry. To get that membership is the present problem.

The proposition to provide a special fund for the purpose by subscription may be in advance of its time. That plan has been suggested. Thus far there has been no response. It is ready for use at any time.

Meantime the officers and members of the Northern Nut Growers Association are at work. Secretary Deming is lecturing with the aid of his own collection of nuts and with stereopticon slides supplied by the U. S. Department of Agriculture. Henry D. Spencer, Decatur, Ill.; S. W. Snyder, Center Point, Iowa, and Joseph A. Smith, Providence, Utah, are doing similar work for the education of the public. It is proposed to establish branches of the Association in the West and in Canada. There should be one or two on the Pacific Coast.

Members of the Association have pledged their work in procuring new members. The secretary has presented a schedule for putting into operation the suggestions on membership by President McGlennon.

The work is progressing.

STRONG DEMAND FOR NUT TREES

J. J. Kelsey, proprietor of the Keso Nurseries, Clinton, Conn., has sold all his Buddy Nut trees, as the result of advertising in the Journal. He has only half as many as he wants for his own use. He had one order for 1000 and several orders for 100 each. Mr. Kelsey says:

"I believe that in the Buddy Nut I have the nut tree we have been looking for. The nuts from all the trees being uniform will enable us to use cracking machines. The elongated shape of the nut is an advantage for extracting whole halves. I saw a Buddy today that is about thirty-five feet high, with a spread of 45 feet that must have more than two bushels of nuts. This tree is 6 years old. Just think of it! These Buddy trees are well worth seeing; also the parent cordiformis."

Mr. Kelsey is a Northern nut grower who is producing striking results. The eagerness with which his trees have been purchased shows the possibilities in the way of extension of nut culture in the Northern states when Nursery stock is available. It would seem that Nurserymen ought to rise to the occasion and grow, advertise and sell rapidly, just as Mr. Kelsey has done.

There are indications that Messrs. Riehl and Pomeroy in a few years will have plenty of company as commercial nut orchardists in the Northern states. We're looking to hear from a filbert orchard soon. Messrs. McGlennon and Vollertsen have been producing the plants in ten thousand lots this season—fine, thrifty plants. These will be bearing soon somewhere.

Mr. Kelsey is already talking cracking machines.

SOME SEE THE POINT

H. W. Smithwick, Americus, Ga., makes an acre of ground yield \$600 with no greater cost than \$30 for cultivation, fertilizing and harvesting. That acre is planted to pecan trees. To produce an orchard that will do this year after year is to produce a piece of property that is worth many, many times the investment.

"If our people would be content to wait for six or seven years before beginning to take their money out of their investment there would be more pecans planted than there are," said Mr. Smithwick. "That seems to be the whole trouble; our people want profits too quick. And so they go on planting cotton and other crops and remain poor, as a rule. I find that the people of the North are much quicker to catch on and see the advantages and great opportunities in pecan culture. The result is that much Northern money is being invested in pecan properties in the South."

Commenting on the subject the Americus Times-Recorder says: "Not everybody makes a success of growing pecans. They can not be planted and allowed to grow without attention, just as does a pine or oak, and results be obtained. These trees, like other fruit trees, require constant care and cultivation to get the best results. The experimental stage is now largely past, however, and the industry has reached the state of a science, more or less. And there is money in it. The remainder of the world is just beginning to get a taste of the Georgia pecan, and is willing to pay fancy prices for all we are producing and probably ever will be able to produce. This is but one of the many opportunities for riches most of us are sleeping over while we complain about the hardness of life."

WHO'LL BE NUMBER 3?

The commercial nut orchards of E. A. Riehl, Godfrey, Ill., and A. C. Pomeroy, Lockport, N. Y., are the forerunners of what is soon to come—a Northern nut culture indeed. The McGlennon-Vollertsen filberts are on the eve of adaptation to commercial orcharding; so also are the four named varieties of black walnuts. Who will be next to announce a crop from a commercial nut orchard in the North?

Japan Walnuts In Nebraska

Editor American Nut Journal:

Last spring I purchased 50 one-year-old Japan walnut trees. They made a very good growth, 30 inches the best, and appeared in good condition until the frost, Oct. 9, killed the leaves. Before the end of the month the trees were all dead but one. Through August, September and October we had a drought with high temperatures. There was in August and September an occasional light shower but with high temperatures the moisture soon evaporated. The drought ruined a number of wheat fields and damaged some trees. At the end of October the drought was broken with a fine two days rain of 2.25 inches.

This experience shows that the Japan walnut will not stand as much grief as some of our garden vegetables.

We have in Nebraska this year a good crop of black walnuts.

W. A. THOMAS.

Lincoln, Neb.

The only college course in pecan culture in the country is that offered by the A. and M. College of Texas.

Just mention AMERICAN NUT JOURNAL.

The Round Table

More Canadian Nut Trees

Editor American Nut Journal:

I am pleased to inform you that I have located a number of good nuts since I saw you in Rochester during the early part of September. I have made arrangements with the owners of these trees for a quantity of nuts, some of which I plan to use in preparing an exhibit for our museum, and others will be planted with the hope that we will get trees that are as good or better than the parents. The kinds and location of each are as follows.

Heartnut—*Juglans cordiformis*—Growing on the farm of Mrs. Nora Bullock and Sons, Aldershot, Ont. Two trees, seven years of age, twenty-eight feet, thirty inches in circumference, height about twenty-five feet, yielded very heavily during the season of 1922. Shell cracks easily, and kernel comes out entire.

Heartnut—*Juglans cordiformis*.—Grows on the farm of A. H. Parker, Islington, Ont. Two trees, five and six years of age. Have grown rapidly, yield heavily and produce nuts of fair size with kernels of excellent flavor.

Heartnut—*Juglans cordiformis*.—Two trees, growing on the farm of Mr. Sylvester Kratz, Jordan Station, Ont. One 25 years of age, two feet in diameter, 30 to 35 feet in height with a spread of branches almost 60 feet. Nut cracks fairly easily, flavor of kernel fairly good; has yielded quite heavily, producing about four and one-half bushels of shelled nuts in one season.

English Walnut—*Juglans regia*.—Growing on the farm of Mr. Hugh Woodruff, St. Davids, Ont. Tree very large, eight feet, nine inches in circumference at one foot from the ground. Height approximately fifty feet, with a spread of branches of 60 feet. Nut fair size, thin shell with kernel of fine flavor.

English walnut—*Juglans regia*.—Growing on Niagara Street, St. Catharines, Ont. Tree nearly three feet in diameter, 45 to 50 feet in height. Yields fairly well.

J. A. NEILSON,
Guelph, Ontario. Lecturer in Horticulture.

Association Has Acted

Editor American Nut Journal:

The Northern Nut Growers Association is no doubt based upon a great and noble idea; but, as their present methods have not had the proper response and results, we ought to try new and different ideas and suggestions, which would, of course, require a good deal of space in the magazine by the many discussions which would result in our forward march program.

Personally, I do not see how the Association expects to progress under their present methods, which seem to me more mechanical than practical. They have apparently tried to start at the top, instead of at the bottom. They have advised the use of nothing but grafted trees, under any and all conditions, which seems to me an extreme measure. They have told their Nurseryman to propagate only budded and grafted trees, with the result that only ended in disappointment, such as: people refusing to buy them at their high prices and unsatisfactory results; Nurserymen refusing to handle them, owing to too many complaints—all of which resulted in their own Nurserymen losing interest in the business and discontinuing their work. Now, it seems that the Association under those conditions ought to

adopt a more liberal policy. Why should it not be considered progress for the association if any kind of a tree is planted—either a grafted, budded or seedling nut tree?

I hope the Association will reconsider this matter and not condemn the advocates of a seedling tree altogether. Would that the business was on such a safe and sound basis that the seedling tree could be ignored. But, at this time it looks like we will still have to consider the seedling—which in case of an experiment ought to be good enough.

CHAS. O. HENNINGER,
707 Terrace Ave., Indianapolis.

Mr. Kelsey Afield

Editor American Nut Journal:

While out canvassing today, I found two places that had nut trees of interest. At the first were a cordiformis and an English walnut growing about twenty feet apart. There are no other nut trees within a mile of this place. The cordiformis tree is about twenty feet high and bears a fine nut which looks exactly like a heart before the outer shuck is removed. The other cordiformis trees here have a nut that appears round in the shuck. However, all of them look alike when the shucks are removed. The English walnut tree is not yet in bearing, but probably will be within the next three years. This combination should make a remarkable hybrid.

I wonder if any reader of the Journal has a hybrid of the English and the Japan large enough to cut for timber. I am anxious to learn the value of such timber.

At the other place I found an English walnut tree 22 years old which so far has borne only three nuts. I am going to plant a Shirley nut tree beside it to see if this will pollinate the other. The Shirley is a Jap and English hybrid. There are no other nut trees near the English walnut.

I also found today a Siebold nut tree. The owner says it is six years old. It bore a bushel of nuts last year, but none this year. The owner said the nuts were of good flavor but that it was hard to remove the kernels from the shell. I cracked about a quart of the nuts, the kernels of which came out in perfect halves. I could have bought the tree for 50 cents when I went there. Now I could not buy it for \$50.

Have just inspected two new Buddy Nut trees, both in bearing. One of them is 8 years old and has a spread of 40 feet. The nuts are exactly the same as those of all the other Buddy Nut Trees.

J. J. KELSEY.

Clinton, Conn.

To Weed or Not to Weed

Editor American Nut Journal:

In nut tree culture the unexpected happened to me. In 1920 and 1921 I planted thirty-eight seedling nut trees which I received from Brother Kelsey of Clinton, Conn. Twenty-five were planted in ground where weeds and bushes were allowed to grow up around them. Thirteen were placed in the garden and given good cultivation. Of the twenty-five in rough ground, none have died. Of the thirteen in the garden ten died. I notice that our friend of Clinton has adopted the slogan: "Feed, Breed, Weed." Perhaps he means "Shade your plants with weeds."

H. J. HILLIARD.

Sound View, Conn.

Oct. 10, 1922.

If it relates to nut culture it should be in the AMERICAN NUT JOURNAL. Please send it in.

Pecan Kernel-Spot And Its Relation To Insect Punctures

J. B. Demaree, Assistant Pathologist, Pecan Disease Laboratory, U. S. Department of Agriculture, Thomasville, Ga.

Paper Read Before the Georgia-Florida Growers Association, Thomasville, Ga., May 24-25, 1922

While a full account of the results of the writer's recent investigation in respect to the cause of pecan kernel-spot will be published and distributed in the near future, it is deemed highly important that this information be made available for the use of growers immediately.

Most pecan growers, especially those residing in the Southern pecan belt, are familiar with the disease and many have withstood serious losses. For the benefit of those unfamiliar with the trouble the following description is given:

As the name indicates, the disease is found only on the pecan kernels and is evident only after the shells are removed. The surface of the spots is frequently slightly sunken, circular in outline and averages about one-eighth of an inch across. See photograph. In color, the spots range from brown to black. Internally they penetrate to a depth of about one-half the diameter of the spot, varying in color from mealy to brown and often surrounded with a distinct brown layer.

The spots occur only upon the ridges and edges and never in the bottom of the depressions of the inside halves of the kernels. The affected portions are decidedly bitter when eaten but do not impart this taste to the unaffected portions of the kernel. Thin shelled varieties, such as Curtis, Schley and Frottscher seem to be among the most susceptible of the budded varieties.

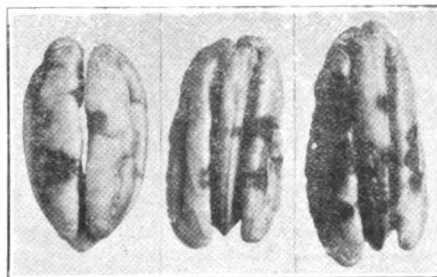
The investigators had made preliminary studies of this disease prior to 1921. The work done by Dr. R. V. Rand, U. S. Department of Agriculture, indicated that pecan kernel-spot was caused by a fungous parasite, while work done by Mr. William F. Turner, Georgia State Board of Entomology, indicated that the trouble was caused by punctures of insects. This obvious contradiction of the two investigations greatly confused the growers as to the adoption of possible control measures. Consequently, most growers made no effort to control the disease. Then, also, the disease has not appeared regularly in the past but has only come to be of serious economic importance periodically and the growers have been pretty well contented to depend upon natural agencies to prevent its occurrence. However, during the past two years there have been urgent requests from growers to have this matter straightened out.

During the past season the writer conducted a thorough and extensive study of the disease. In preparation for this work, about two hundred and fifty clusters of Curtis and Schley pecans were separately incased in screen wire cages. A portion of these cages were reserved as checks while in each of the remainder from four to seven adult specimens of Southern green stink bugs were placed during the first week in September. The bugs remained in these cages until the nuts were mature. The nuts were then shelled and carefully examined for kernel-spot injuries.

Of ninety-one check nuts, or those nuts caged but with which no bugs were confined, all were entirely free of any evidence of kernel-spot. Of three hundred thirteen nuts that were confined with bugs, 97.7% were badly spotted with typical kernel-spots. This part of the experiment seems to prove very

conclusively that kernel-spot is caused either directly or indirectly by insect punctures, with the weight of evidence favoring a direct causal relation.

It is not uncommon for insects to transmit micro-organisms with their piercing mouthparts to plant tissues that they feed upon and it was thought possible that this may be the case with the insects causing pecan kernel-spot. With this supposition in view, a laboratory study was made of the diseased spots. The writer made over four hundred cultures of a like manner of kernel-spots on beef and cornmeal agar. Over one-half of these cultures remained sterile, indicating that no organisms were present in them. In reference to those spots producing growths, eight forms of fungi and three of bacteria were isolated but no one form was in any way constant. These organisms that were found were not considered as being parasitic. We may conclude from this that kernel-spots are caused directly by insect punctures and the pathological result may be due to the mechanical rupturing of the host cells, by the sucking up of plant



PECAN KERNEL SPOT (Demaree)

juices, by injections of toxic substances into the tissues or a combination of all three.

There has been very little, if anything, done in the way of devising means for controlling pecan kernel-spots. It appears, however, that remedial measures must be worked out from an entomological standpoint. Since the writer has determined definitely that sucking insects are the direct cause of the trouble the matter of its control is fundamentally a matter of controlling the insects. It has been the writer's observation, as well as that of Turner and several other entomological writers, that cowpeas are one of the most preferred host plants of the Southern stink bugs. It is also stated by persons who have made a study of this insect that the velvet bean is not an important host plant of this bug. This being true, it seems logical to conclude that it will be much safer to substitute velvet beans for cowpeas as a cover crop in pecan orchards. While these stink bugs are strong fliers and are capable of flying long distances, it is safe to reason that there will be a less number in an orchard when planted to a crop not especially attractive to the bugs and thus will prevent their accumulation in pecan orchards in enormous numbers as they often do when planted to cowpeas. These plant bugs are not known to breed upon pecans and only go to them when their more preferred food supply is exhausted. It, therefore, seems highly essential to eliminate, as far as possible, in the pecan orchard such crops that will attract the insects.

In support of the writer's recommendation to substitute velvet beans for cowpeas as cover crops in bearing pecan orchards the following extracts from correspondences

received from prominent southern entomologists in reference to the relative importance of these two field crops as host plants for the Southern green stink bug are given:

"I have never noted *Nezara viridula* in any great numbers on velvet beans, though it appears to be especially partial to legumes. It is a serious pest of garden beans and cowpeas and I have seen it very numerous on soybeans, especially late in the year. The species is a southern one, insofar as the United States is concerned, and is apparently only of consequence as a pest in the extreme southern part of the country. Our observations indicate that even in this section, however, it sometimes becomes cold enough to kill both nymphs and adults."—Mr. Thomas H. Jones, Entomologist, Louisiana Agricultural Experiment Stations.

"While the stink bug feeds on velvet beans there can be no doubt that this is not a favorite host. On the other hand, I have found them more abundantly on cowpeas, year after year, than on any other field crop. This abundance has been so pronounced that it carries the unavoidable impression that cowpeas are one of the favorite hosts of the insect.

"I have never seen the bugs breeding on velvet beans, although they very possibly do so. They do breed on cowpeas in large numbers.

"Future work, especially if there should occur a change in our agricultural practice, may bring different results, but at the present time I am confident that we are justified in recommending a change from cowpeas to velvet beans for cover crops in pecan orchards.—Mr. William F. Turner, Entomologist, Georgia State Board of Entomology.

"In reply will say that *Nezara viridula* does not infest velvet beans nearly as severely as it does cowpeas. In fact, velvet bean is not an important host plant of this bug. I would place even sweet potatoes ahead of velvet beans in that respect. You do find a few on velvet beans but not as many as on a great many other plants including radishes, petsai, beggarweed and even such crops as lettuce and Irish potatoes."—Prof. J. A. Watson, Entomologist, University of Florida.

The Southern green stink bug is a tropical or sub-tropical insect and its northern limit of distribution does not extend much farther north than Atlanta and Birmingham. Evidently, extreme low temperatures during the winter months will cause the death of many of these bugs. It is a noteworthy fact that during the past seven years kernel-spot has been most severe during seasons following mild winters favorable for the hibernating bugs. On the other hand, very little kernel-spot occurred in south Georgia during the year 1917, 1918 and 1919 when the minimum temperatures recorded by the U. S. Weather Bureau at Thomasville, Ga., were 13 deg., 15 deg. and 18 deg. respectively for the three years named above.

While kernel-spot may be found in all parts of a tree, the greatest amount occurs on the lower limbs where the nuts are more easily accessible to the bugs as they are leaving their exhausted food supply nearer the ground. Owing to this fact, in an orchard badly affected with kernel-spot the grower should harvest the lower third or half of the tree first.

**NORTHERN NUT
GROWERS ASSOCIATION**
Dr. W. C. Deming, Secretary

Recently I gave a talk on nut growing before the Garden Club of Wilton, Conn. The members of these garden clubs and similar societies are good people to reach, often of some leisure and wealth, always thinking people and nature lovers. It is from such people that our support will come.

I was able to illustrate the talk with native chinkapins grown in Hartford, Conn., and at my own place; with two forms of the Van Fleet hybrids, Japanese chestnuts, the promising Chinese chestnut, a splendid unnamed European chestnut, a smaller one, probably a Paragon seedling—all of my own raising; a collection of chestnuts and chinkapins from Mr. Riehl, twelve varieties of filberts from the McGlennon Nurseries in Rochester, and some of my own raising, the Laney hybrid hickory from the original tree in Rochester, the Kirtland shagbark grown on my own grafted trees, pecans grown in Hartford, Ridenhauer almonds grown on two-year-old branches from buds put into one of my peach trees, English walnuts grown in Danbury and Bristol, Conn., the Thomas and Stabler black walnuts and the O'Connor hybrid walnut, Japanese cordiformis walnuts and their butternut-like progeny.

I also used as illustrations a collection of colored slides on nut culture lent to the association by the Bureau of Plant Industry at Washington. This collection of slides is at the service of any member of the association who wishes to use it in a public talk. I can also lend some of the nuts mentioned above and I hope to be able to get together a good representative collection for this purpose that any member may have on request for use in giving talks on nut culture.

With a collection of specimens and some good slides to talk to, it is perfectly simple even for the inexperienced to give an interesting talk on nut culture.

On Oct. 12 I picked a cluster of two pecans from the big tree, 10 feet in circumference, in the grounds of the Hartford Re-

Variations In Seedlings—Especially Pecans

By J. G. Woodroof, Assistant Horticulturist—Bulletin of
Georgia Experiment Station

There is a condition that exists in the growing of seedling trees that is interesting to the fruit grower as well as to the Nurseryman and investigator. It is the striking differences in size, height, and vigor that appears among seedlings after they reach the age of a few months. Seeds from the same tree, planted in the same row, under the same conditions, will, after a few months

treat. One nut was not filled, but the other was a perfect nut, one inch long, mature, well filled and very thin shelled. I could not determine the quality. I could not see any other nuts on the tree at this time, although there was quite a sprinkling of them earlier in the season. Very likely the numerous squirrels in the Retreat grounds had disposed of the others.

The origin of this tree is unknown, so far as I have been able to learn, but this observation ought to dispose of the question as to whether it is possible for a pecan to mature in Connecticut.

W. C. DEMING.

growth, show marked differences in many respects. These variations are present in the seedlings of almost all fruits, but especially so in the case of the pecan.

This was very strikingly shown when more than 2,000 seeds from 25 different varieties of pecans were planted at the Georgia Experiment Station. At an early age the variations were not so prominent, but as the seedlings grew to be two or three years old, they were especially noticeable. The nuts that were planted were uniform in every respect except of different varieties, were planted in rows within five feet of each other, and treated in the same manner at all times. At the end of three years each variety was distinguishable by the size and vigor of the trees. The trees of some of the varieties were more than twice as large as those of other varieties, and there were many degrees of vigor and thriftiness in the Nursery rows. Besides the differences in the varieties there were marked variations in trees of the same variety, ranging in height from seven feet down to ten inches.

These facts are interesting to the Nurseryman, because he wants to plant such varieties that will give him the most thrifty seedlings. The 25 varieties at the Station may be classified as to their uniformity for seedlings as follows:

Good—Bradley, Lee, Teche.

Medium—Appomattox, Alley, Nelson, Mantura, Schley, Pabst, Rome, Froscher, Money-maker, Van Deman, Brooks, Robson.

Poor—Beverage Triumph, Mobile, San Saba, Jerome, Curtis, Stuart, Centennial, Russel, Atlanta.

The fact that a certain variety does not produce good seedlings is not an indication that it is a poor nut, commercially.

This is of interest to the home grower of nuts because he is warned against buying the poor stunted specimens that appear in all of the varieties. A two-year-old tree that is in a healthy, vigorous, and thrifty condition is to be preferred to a three-year-old tree that is not in such a condition.

Just mention AMERICAN NUT JOURNAL.

MEMBERSHIP DRIVE

National Pecan Growers Association

The National Pecan Growers Association fee for membership is \$2.00 per year, with a student membership fee of \$1.00.

The subscription price for the American Nut Journal, official organ, is \$2.00 per year.

Note combination offer below.

REGULAR YEARLY RATES

Association Membership.....\$2.00
American Nut Journal..... 2.00

SPECIAL YEARLY RATES

Association Membership } \$3.25
American Nut Journal }

Address J. Lloyd Abbot, Sec'y.
Route 1, Spring Hill, Ala.

GET PECAN LAND

Where Pecans Were Born

Large and small tracts of the finest pecan land in the world can be bought cheap **right now**.

A new project to irrigate the San Saba valley will send land prices to four and five times the present figure.

Pecan orchards planted and developed by experts for non-residents. Unplanted land can be bought **now** at \$35 and upward per acre. All titles perfected.

A. W. WOODRUFF

Secretary, San Saba Pecan Co.
SAN SABA, TEXAS

A. M. MACHECA & CO.

Arthur M. Macheca
St. Louis, Mo.

Edward S. Malecek

FRUIT AND PRODUCE BROKERS 800 N. 3d St.

We can place YOUR PECANS to good advantage. Send samples and quotations. Correspondence solicited.

References: The Produce Packer or National Bank of Commerce.

PECANS WANTED

Will pay cash for paper shell pecans, large or small quantities. Send samples and prices; also how much you can furnish. The OHIO PECAN CONFECTION CO.
147 East Main St., Columbus, Ohio

FOR SALE—"PECAN VILLA"

Highly improved. 800 tree orchard. A gentleman's estate and revenue producer.

H. M. BANNING, Owner
CITRONELLE, MOBILE CO., ALA.

List Your Wants And Offerings In

THE OFFICIAL JOURNAL

Every Month To Every State In The Union

AMERICAN NUT JOURNAL
ROCHESTER, NEW YORK

The American Nut Trade: Market and Crop Reports

PERSIAN WALNUT

Oregon Walnut Crop

A McMinnville, Oregon, newspaper says: "Walnut harvest is in full sway now east of Amity, reports the Standard, on the big plantings, and a good crop is reported this year. This is a coming industry for the community and one that is to be reckoned with that will mean a big revenue to the community. Both the Gibbs and Osborne dryers are busy drying the nuts and it is certainly a pretty sight to see a whole kiln full of walnuts.

"It is said that walnuts in some of the nut orchards are disappearing at a rapid rate, avers the Sheridan Sun. One man reported that he had discovered a cache where the squirrels had gotten away with five sacks. The busy little animals seem to be the cheapest pickers if their store house could be located.

"Chas. Trunk of Dundee, has already taken off twenty tons of nuts and will have between 25 and 30 tons when harvesting of his grove is completed. The price of these nuts will be 30c per pound, for Mr. Trunk has his crop already sold at that figure. Taking 25 tons as his crop for this year will bring in \$15,000 for this year's crop. \$15,000 on about 44 acres of walnuts is not so bad when one considers that the trees range from ten to sixteen years of age and that as years go on the yield will increase."

J. C. Cooper, McMinnville, adds: "Yamhill county will have 340 tons of walnuts this year. Good walnut land in the county is capable of producing 15,000 tons."

California Walnut Prices

An announcement from the California Walnut Growers Association makes it plain that the American public will pay less for walnuts this year than last, despite the higher tariff on walnuts. Prices for the association's crop this year were set as follows: No. 1, 22½ cents; No. 2, 17½ cents; fancy budded, 26 cents; extra fine jumbos, 31 cents. Last year's closing price for No. 1 was 27 cents, although the market opened at 24½ cents.

The production this year will be the heaviest in the history of walnut production in California. It is estimated that the yield will be 50,000,000 pounds, valued at about \$12,000,000.

Manager C. Thorpe of the association states that California walnut prices are now practically back on a pre-war basis. Reduction of the prices was necessary, he says, to stimulate buying of the huge crop, although buying power is now greater throughout the country than it was last year.

New crop Bordeaux walnut halves of the first shipments show disappointing quality as the offerings are not up to 1921 levels, due to unfavorable cold and wet weather, while the nuts were on the trees.

Nutting parties are proving profitable as well as popular in Fountain county this fall. Walnuts, hickory and chestnuts are found in abundance in many places and many families have gathered large quantities for use this winter.

Just mention AMERICAN NUT JOURNAL.

Walnut Production In China Held Back

Greatly increased production or exports of walnuts from China in the near future seem unlikely unless changes in the local system of taxation and improved transportation facilities make products from the remote interior region available to markets.

Information to this effect has been received by the United States Department of Agriculture from its representative, C. A. Reed, now engaged in securing first-hand information regarding the extent to which walnuts of the so-called English type are grown in various provinces of China; as well as to determine whether or not there are varieties in use there which would be of interest and value to walnut growers in the United States.

The crop of walnuts in China this year, Mr. Reed reports, is somewhat larger than last year, although the nuts themselves are smaller and the quality is quite variable. This is because the nuts are the product of

seedling trees planted singly or in orchards of less than 100 trees. They range in age from 20 to 200 years. The trees are infested by many defoliating insects and some borers, but no signs of blight or other conspicuous disease injury has been noted in the districts thus far visited.

For the most part the walnut trees are cultivated. The nuts are harvested by being clubbed from the trees two to five weeks before they are ripe and placed in piles on the ground and covered with sand or millet straw. After passing through a sweat for a week, the hulls are removed, the nuts washed, and are then considered cured. Chinese merchants of the larger country towns cure and grade according to native standards and ship the nuts to export centers where foreign buyers recure, regrade, and usually bleach those intended for export. This year the export season at Tientsin is late and progressing slowly. On October -10, it was just beginning.

THE FILBERT

C. E. Schuster in the County Gentleman says that the beginning of filbert culture in the Northwest was the planting by a neighbor of David Grenot in 1876 in Douglas county, Oregon, of 50 seedlings raised from nuts brought by Grenot from Europe. The trees were planted in a fence row.

Discussing the possibilities of filbert culture in Oregon, Mr. Schuster says that George A. Dorris (whose activities have been described from time to time in the Journal) in 1903 planted his first filbert trees, two-year-olds, near his house in Springfield, Ore.

A few of them bore a nut or two that year," said Mr. Dorris, "and in no year since then have they failed to bear a crop according to the size of the trees. In that purchase were Red Avelines, White Avelines, Davianas and Barcelonas. Of these the Barcelona is the only variety to consider for commercial plantings. Since that time I have obtained the DuChilly as a pollinizer for the Barcelona.

"That first shipment of trees was planted twelve by fifteen feet apart, the usual distance recommended at that time. Later developments have shown this distance to be too close, as I now have trees with a spread of twenty-two to twenty-five feet. Of course these trees have never had any pruning or training, and it is unlikely that well-pruned trees would reach these proportions so soon. Filbert trees should not be set closer than twenty-feet and in the better soils should be set twenty-five feet apart."

"Will filbert growing pay? Now, let me tell you, I believe it is one of the best orchard crops to grow in Oregon. In one of my plantings which is eight years old the Barcelona trees each yielded from fifteen to twenty pounds last year, while the six-year-old trees bore from two to six pounds, each. We received from thirty to thirty-five cents a pound for our crop."

In the mild climate of the Pacific Northwest the trees assume a considerable size, continues Mr. Schuster, as is shown by one tree in Portland with a spread of over thir-

ty feet and a circumference of forty-six inches, one foot from the ground. This same tree produced between seventy-five and eighty pounds of nuts in 1921. While the trees develop vigorously in Western Oregon and Washington the record for bearing is just as good, for there has been no instance of a complete crop failure.

In December, 1919, this section of the country had an unprecedented cold snap which cased the oldest old timer to overwork his imagination to equal it in past history. Orchards of other fruits were killed, but few filbert trees were damaged.

In soil requirements the tree seems to be rather lenient, provided the soil is fertile, deep and well drained. Vigorous, heavy producing trees are found on several types of hill soils as well as on the river-bottom soils and that of the second and third benches. In choosing a location one criterion adopted by many growers is: "Where the wild hazel grows thriftily the filbert will do well."

Replacing Apple With Walnut Trees

Charles O. Henninger, Indianapolis, Ind., directs attention to an orchard of seedling English walnuts at Lakeside, Wash., owned by D. H. Hulseman, which he says should be learned of in detail by the Northern Nut Growers Association. The trees are from Franquette nuts, says Mr. Henninger, and so profitable is the orchard that Mr. Hulseman is cutting out his apple trees to make room for more English walnut trees. Mr. Henninger adds:

"The nut he raises is far superior to any English walnut that is produced here in our Northern zone—much better than the Pomeroy or the Thomson nut and just as hardy. The climatic conditions at Lakeside, Wash., compare favorably with certain sections of the Atlantic seaboard and the south shore of Lake Ontario, and I believe that about the same success could be had with this nut in the latter sections."

Among recent publications is Bulletin 1102, U. S. Dept. Agr., on "Kernel-Spot of the Pecan and Its Cause," by J. B. Demaree, assistant pathologist, Bureau of Plant Industry.

THE PECAN

Building Groves In Texas

An Awakening at Last on the Subject of Improved Pecans

Editor American Nut Journal:

I inclose a clipping from the Stephenville (Texas) Tribune. During the past fifteen years quite a number of farmers have planted pecans, and some cared for the young trees, while others neglected them. However, within the past five years there has been a real awakening and there are now those who are caring for the old groves, while others who have no wild trees are planting the budded sorts. There are no acreages of over twenty acres as yet; but a good start has been made. Lack of familiarity with the art of budding is the great handicap. It is true, the state sends out lecturers, but their work is slow. There is one exception, and this is J. H. Burkett, Clyde, Texas. He goes to a farm, does some bud work, appraises in minute detail the entire process, and then he asks some member of the family, preferably a son or a daughter, to cut, seat and tie a bud. Usually he makes a convert. He instructs as to the after care of the buds.

Last year I gave away hundreds of buds and one man has had fine success. He will soon have fifty acres of trees, more than enough to provide for old age.

G. W. JENKS.

Stephenville, Tex.

In a timely article on the essentials of a pecan industry in Texas, J. H. Burkett, noted Texas authority, says in a recent issue of Fletcher's Farming, Hondo, Tex.:

"The first and most important urgent necessity, for the development of the state's nut industry is a compact, systematic and efficient organization. It is utterly impossible for the state to make satisfactory progress in the absence of such an organization in which the growers themselves are the dominating factors. Any organization that does not recognize the growers' interests as of first importance will fail to accomplish the best results. The foundation of a profitable nut industry must of necessity be builded on the prosperity of the individual grower as a unit of production, and of all growers collectively. The great variation in the grades of the native crop throughout the state, and even the variation of the grades in a given locality, from year to year differs so much that the grower should have some standard by which his product may be classified. We must greatly reduce the number of varieties."

History of the Texas Pecan

Austin, Tex., Oct. 31—The most extensive report ever prepared by the State Department of Agriculture on pecan growing in Texas is now being compiled by J. H. Burkett, nut specialist of the department, and

will be published next month, according to Commissioner of Agriculture George E. Terrell.

The new bulletin will include a complete history of pecan growing in Texas, production statistics and information on growing nuts. Texas produces in ordinary years more than 50 per cent of the pecan crop of the entire Nation, according to Mr. Burkett.

Oaklawn, La., Crop Failure

New Orleans, La., Oct. 28—The pecan crop in the section around Oaklawn, La., is a complete failure. Trees that produced two to three hundred pounds last year are only producing two to three pounds this year, and this is so all over this section of the country. It is the worst crop we have ever seen. There are no pecans for sale here; the few nuts that we get we are going to keep for home use.

EDWIN BECK.

Buys Winona Pecans

Winona, Tex., Nov. 3—The Alex. Woldert Company of Tyler, has purchased the crop of pecans of the Combination Orchard Company here, paying 40c per pound all around. This orchard is the largest in Texas and is believed to have more pecans on the trees than any in the state.

Students Study Pecans

Auburn, Ala., Oct. 28—For the purpose of making a study of practical pecan growing and pecan grove management, forty-five students in horticulture, led by Professors C. L. Isbell and R. G. Briggs of the horticultural department, recently visited the large pecan grove owned and managed by J. A. Kernodle of Camp Hill.

North Texas Pecan Crop

Indications are that the North Texas pecan crop will be well up to the average, said A. B. Jolley, county agricultural agent at Dallas. The pecan harvesting starts after the first frost, usually the latter part of November in North Texas and about Dec. 1 in South Texas, Mr. Jolley said.

At a meeting of the Texas Pecan Growers' Association at Brownwood, Texas, recently, it was agreed to place the minimum amount of pecans to insure sign-up contracts for next year at 500,000 pounds, although the goal is 1,000,000 pounds.

Reports from Indiana state that an unusually large crop of native nuts—hickory, walnut, butternut, chestnut and beechnut—was gathered this year.

Eusebius Embree, Evansville, Mo., is selling black walnuts on the Moberly market at \$1.25 per bushel. Two years ago he sold \$100 worth.

If it relates to nut culture it should be in the AMERICAN NUT JOURNAL. Please send it in.

ORDER YOUR PECAN SHIPPING CASES
NOW SO AS TO HAVE THEM
WHEN YOU NEED THEM

PAK-RITE

Corrugated Pecan Shipping Cases

Carried in stock for immediate shipment

Size	
No. 1.....	\$ 3.30 per hundred
No. 2.....	3.95 " "
No. 3.....	5.15 " "
No. 5.....	6.45 " "
No. 10.....	7.77 " "
No. 20.....	10.00 " "
No. 25.....	10.85 " "

F. o. b. Atlanta, Ga.

Orders for less than 100 of a size 50c extra.

Send us your orders

CORRUGATED PAPER PRODUCTS Inc.

ATLANTA, GEORGIA

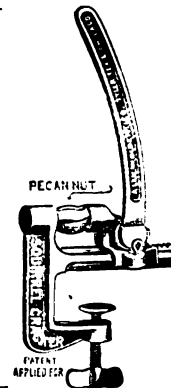
Squirrel Nut Cracker

BEST ON EARTH

Cracks the Shell but not
the Kernel.
Adapted only for table
nuts—especially Pecans.

ALEX WOLDERT CO.

SOLE DISTRIBUTORS
TYLER, TEXAS and CHICAGO, ILL.



PECAN TREES

We Grow Them Right
We Pack Them Tight
We Price Them Right

Southern Nut Tree Nurseries,
THOMASVILLE, GA.

NUTS: Pecans, hickory nuts and black walnuts, for eating and planting. Fresh from native Southern Indiana seedling trees. Quality of this year's crop good.

INDIANA NUT NURSERY
J. F. Wilkinson, Prop.

Rockport

Indiana

Finest Paper Shell PECAN TREES Grown Wright's Mammoth Stuarts, Success, Schleys, grafted above ground. Strong, vigorous stocks with heavy, well-developed roots. Well spread tops. Will bear in 3 to 4 years. Trees 7-8 to 8-9 feet \$1.25, lots of 100 to 1000.
THE CALIFORNIA RANCH,
Helena, Miss.

The U. S. Dept. of Agr., is considering the advisability of prohibiting shipment of pecan trees or pecan nuts infested with camphor scale, from Louisiana and Alabama.

The Logical Market Place for Sale of Nuts

The Advertising Columns of the American Nut Journal Chief Exponent of the Trade.

Hundreds of Readers of this Journal Ask for Pecan Nuts in Moderate Quantity at Prices Less Than the Retail Price per Pound in Northern Markets. They Would Be Eager Buyers if They Knew Where to Apply. If There is Any Surplus at Any Time, the Advertising Columns of this

Journal Will Dispose of It. Rate, \$2.80 per Inch. Announcement Should be Maintained the Year Around (Yearly Rate, less than 60 Cents per Inch a Week) to Secure Best Results. Make Your Name a Household Word Wherever Pecans Are Wanted. Make It Easy To Procure Them.

AMERICAN NUT JOURNAL

P. O. Box 124

ROCHESTER, N. Y.

THE PECAN

National Pecan Exchange Prices

There was an error in the Journal's report of President Bullard's quotation of this year's prices as fixed by the National Pecan Growers Exchange.

The prices are wholesale f. o. b. Albany, Georgia, and net, which means without the one or two per cent discount usually given by shippers.

This year's prices are 35c, 45c, 55c and 70c. The lowest price is for a No. 2, small nut, of the budded varieties and does not include No. 2 Schley which will sell at wholesale at 50c.

Pecan Harvest at Shenandoah, Ia.

A despatch late last month from Shenandoah, Iowa, said: Matt Baker is gathering pecans from three trees he planted on his farm near this city, four years ago."

In the Southwest

New Orleans, La., Nov. 2—The pecan crop is probably not over 12% of normal in Arkansas. It is very poor in Louisiana and is being harvested on the Gulf Coast in Mississippi where crop is shorter than last year but quality better.

LIONEL L. JONES,
Agr'l Statistician.

J. B. McCall is establishing a pecan cracking plant and grading warehouse at Monticello, Fla. The new enterprise will be of practical aid to the substantial pecan industry in that vicinity. Machinery has been ordered, and will be installed in a building 20x40 feet, recently erected by Mr. McCall.—Columbus Industrial Index.

The pecan grower who keeps the girdled-off twigs of his trees picked up and burned in late fall and winter, has an eye open to business. Scientific men tell us that in the newly fallen girdled-off pecan or hickory twig are the eggs of an insect that may hatch out and in turn girdle-off more twigs, ad infinitum.

IN NORTHERN STATES

Pecan Near Cincinnati Bearing

The northern range of the Indiana pecans is favorably and definitely settled insofar as Cincinnati and vicinity is concerned.

While touring out the Ohio Pike past Tobasco in Clermont County, which is east of this city, I discovered a large spreading pecan tree growing close to the pike. I secured a few samples of this year's crop, and was informed by the owner that the nut from which the tree grew was brought forty years ago from Rockport, Indiana. The nuts are the same as the seedling nuts which J. F. Wilkinson of Rockport, Indiana, sells each fall.

HARRY R. WEBER.

Kentucky Nut Crop

Maysville, Ky., Nov. 3—The black walnut and hickory nut crops in this Northern Kentucky and Southern Ohio districts is very heavy this year. Carlot shipments of black walnuts and a heavy volume of shelbark hickory nuts in local lots are being packed and forwarded by the Star Produce Company here. The concern puts up the nuts in new even weight barrels, containing four bushels. Alva West, manager of the firm, says that there is a fairly good demand for the nuts this year, and he expects to continue packing and shipping up until the holidays.

Few Butternuts Now

Columbia City, Ind., Oct. 27—Butternut trees in Northern Indiana have become all but extinct and few of the variety of nuts were harvested this fall.

The walnuts and hickory nut crops in this section of the state were unusually large this year.

If a lot of us whose bottom land, especially if it lies along the river banks had possessed the foresight ten years ago to have planted just a few acres in pecan trees and given them ordinary care for a few years, they would have been in full fruitage now. Instead of being pitied as the "poor flood

victims" of a year like this, we would be "settin' pretty" and counting the proceeds from the sale of our pecan crop.—Salisbury, Mo., Press-Spectator.

Grafted Walnuts in Indiana

Martinsville, Ind., Nov. 3—My grafted black walnut trees are bearing this season. Of course they haven't the age to bear many nuts. I have some one-year grafts that bore nuts this season, some so heavy that they broke off, even though supported. Have Stabler, Thomas, Ohio and Miller bearing this season. We have heavy crops of wild walnuts and beechnuts. The Stabler is a beautiful nut on the tree, as it is pear-shaped.

OMER ABRAHAM.

City Folks Work for Nut Growers

A farmer near Wadsworth, Ill., whose nut trees were a continual source of attraction for motorists from Waukegan, after he had compelled a Waukegan party to unload three bags of walnuts which they had picked up on his property, admitted to them that to date he had secured \$150 from nutting parties as the result of selling them the nuts after they had invaded his premises and gathered the harvest.

Others in Waukegan have had the same experience of going to the country and gathering a harvest of nuts and then just as they think they have all they will need during the winter, the farmer appears on the scene and demands that they leave the nuts or pay.

In short, most of the farmers of Lake county have had their nuts harvested by people from the city who have not been paid for their services and who have done a nice clean job all the time.

W. G. Slappey, Takoma Park, D. C. writes: "My dozen young pecan trees here at Takoma Park, set out a year or so ago—of the Butterick, Indiana, Niblack, Nelson, Money-maker, Success and Stuart varieties—are growing vigorously, though I have had to fight the twig girdlers with Bordeaux mixture."

Budded and Grafted
HARDY NORTHERN NUT TREES
Best varieties, grown in natural nut soil. Send for catalog. Have your seedling nut trees topworked to these fine varieties.
Information and estimate on request.
INDIANA NUT NURSERY
Rockport, J. F. Wilkinson, Prop., Indiana

PECAN TREES

100,000 TREES—STANDARD VARIETIES
WE GROW NOTHING BUT PECAN TREES
HIGH QUALITY—SERVICE THE BEST
SIMPSON NURSERY CO., MONTICELLO, FLA

THIS SPACE
\$2.50 Per Month Under yearly Contract
Under less than yearly term:
\$2.80 Per Month

PECANS
We are the pioneer growers of budded and grafted pecans in the South. Have a complete stock of the leading standard varieties. Can furnish trees we know will please and give satisfactory results. Catalog free.
INTERSTATE NURSERIES
C. M. Griffing & Co. Props., Jacksonville, Fla.



NEW EDITION FREE

A practical guide showing how to bud pecans. Tells how to grow trees 12 inches in diameter by the end of the 8th year, which yielded 400 lbs. nuts per acre.

Trees, Nuts, Groves for sale direct without agent at attractive reduced prices
B. W. STONE, Thomasville, Ga.

WANTED—PROPAGATOR

Have employment for expert propagator to graft several thousand pecans on one and two year old stocks. References required and furnished. Results must be guaranteed.

J. H. BURKETT, Clyde, Texas

SUCCESS

and other leading varieties. Also citrus
BECHTEL PECAN NURSERIES
Ocean Springs, Miss.

PECAN TREES

Plant them this year! Buy direct from nursery and save agent's profit. All standard varieties; quality and service the best. Write us for prices.

FLORIDA NURSERIES

W. W. Bassett, Prop., Monticello, Fla.

AMERICAN NUT JOURNAL

Of National Circulation

Covering Every Phase of Nut Culture

Subscription: - - \$2.00 Per Year
Advertising: - - \$2.80 Per Inch

Official Journal { National Pecan Growers Association
Northern Nut Growers Association

AMERICAN FRUITS PUBLISHING COMPANY

39 State Street, Rochester, N. Y.

Line-Up of National Pecan Growers Association Members In Annual Convention at Thomasville, Georgia, October 1922

(Continued from page 58)

J. Scarboro.....	Tifton, Ga.	35	6	3,000
Jas. E. Workman.....	Leesburg, Ga.	80	3	
W. O. Kinney.....	Macon, Ga.	35	15	
L. A. Niven.....	The Progressive Farmer, Birmingham, Ala			Just purchased orchard
T. H. McHatton.....	Athens, Ga.	25	2-12	
J. H. Cautier.....	Macon, Ga.	150		
C. C. Jernigan.....	Brunswick, Ga.	None		
H. C. White.....	Putney, Ga.	1000	10	V. Beans and Corn
C. L. Stellman.....	Monticello, Fla.	30	10	V. Beans and Peas
S. L. McElvey.....	Ocilla, Ga.	75	2 to 7	
So. Nut Tree Nurseries.....	Thomasville, Ga.	50	2 to 9	Beans and Oats
J. N. Gillespie.....	Albany, Ga.	1075	4 to 9	V. Beans
J. B. Gill.....	U. S. Dept. Agriculture. Bureau of Entomology			
J. S. Dean.....	Dawson, Ga.	115	7	Corn, Cotton and Beans
A. L. Crittenden.....	Shellman, Ga.	90	6	Peaches 65A Peas 25 A.
J. O. Darsey.....	Cairo, Ga.	75	14	Lespedza
J. R. Drake.....	Putney, Ga.			
L. R. Jenkins.....	DeWitt, Ga.			
W. W. Whitaker.....	Putney, Ga.			
J. L. Crandle.....	Putney, Ga.			
L. Williams.....	Putney, Ga.			
H. H. Jones.....	Putney, Ga.			
Jerome Brown.....	Albany, Ga.			
A. M. Allen.....	Columbus, Ga.	25	19	8,000
W. W. Timmons.....	Tifton, Ga.	25	14	8,000 lbs.
Keith Carson.....	Tifton, Ga.			
J. H. Allen.....	Fort Valley, Ga.	250	5	
Felton & Wright.....	Macon, Ga.	250	1-3	
J. A.	Lovett, Ala.	43	11	600
Herbert Vinerg.....	Fort Valley, Ga.			
Louis L. Brown.....	Fort Valley, Ga.	100	8	Peaches
A. M.	Fort Valley, Ga.	50	4	Peaches
J. P. Zeigler.....	Metcalfe, Ga.	40	12	Peanuts, Japan Clover
T. M. Callaway.....	Baconton, Ga.			
Theo. Bechtel.....	Ocean Springs, Miss.	150	11	Legumas, White Clover, Velvet Beans, Beggar Weed
L. V. Pringle.....	Biloxi, Miss.			
A. S. Perry.....	Cuthbert, Ga.	7200	1-10	Legumas
H. P. Striker.....	Experiment, Ga.			
Harry N. Jackson.....	Baconton, Ga.	5000	5-16	Legumas
J. C. Thomas.....	Metcalfe, Ga.	10	4	
J. Lloyd Abbot.....	Mobile, Ala.	800	4	Satsumas
W. C. Stafford.....	Barnesville, Ga.	35	15	Rye and Peas
B. W. Stone.....	Thomasville, Ga.	200	9	Farm crops
W. A. Brockhurst.....	Yonkers, N. Y.	40	2 to 6	Corn and Beans
Willard C. Hadley.....	Thomasville, Ga.			
Robt. E. Brown.....	Fort Valley, Ga.	75	5	Corn and Peas
Edwards & Patterson.....	Milledgeville, Ga.	100	16	Peas and V. Beans
J. G. Woodroof.....	Experiment, Ga.	40	1BA	Corn, etc.
D. D. Morris.....	Monticello, Fla.	260	14	Soy Beans
G. F. Orum.....	Midway, Ala.	150	4 to 12	Regular farm crops
O. Woodard.....	Tifton, Ga.	10	1	Given to research work
D. E. Phillip.....	Smithville, Ga.	84	15	Farm crops lespedza
C. B. James.....	Montgomery, Ala.			Hort. L. & N. R. R.

The Market For Nuts

Herschel H. Jones in American Agriculturist

At this time of year there are always inquiries as to where and how to ship nuts to market. As far as I know there is no commercial growing of nuts of any consequence in the Eastern states at the present time. The bulk of the wild crop which is gathered mostly by boys, is sold and consumed locally. Nevertheless a very considerable quantity of chestnuts, hickory nuts, walnuts and butternuts finds its way to New York City in small shipments every year. These come for the most part to licensed commission merchants who sell them as they receive them, for five per cent commission. There are several large retail nut dealers who will pay the market price of the day for nuts shipped to them, without deducting any commission; but, of course, the shipper in such cases trusts his goods entirely to the buyer without any of the protection afforded by law in commission transactions.

New York State chestnuts, which have the reputation of being superior to any others, are selling wholesale at the time this is written at \$12 to \$14 a bushel for fancy stock. Southern chestnuts which are more or less wormy are bringing only \$5 to \$6 per bushel. Chestnuts always bring the highest prices early in the fall. New York chestnuts have brought as high as \$27 a bushel this year. Later in the season the domestic supply is heavier; there is less trouble with

worms and quantities of Italian chestnuts come in. The Italian nuts are very much larger but inferior in quality.

The chief problem in marketing any nuts is to keep them free from worms, which is almost impossible in warm weather. Generally the quicker they are shipped the better and immediately before shipping they should be sorted over and all wormy nuts picked out. Sometimes it helps the nuts to soak them in cold water, and keep them from drying out and losing weight. I have known nut dealers to keep chestnuts in ice water three or four days during hot weather to keep them from developing worms.

Hickory nuts, which are quoted wholesale now in New York at around \$3 to \$4 per bushel, must be carefully sorted, as to size as well as for worms, and should be clean, of white-shell. Only shellbarks are in demand. Small nuts mixed with large spoil the price for all.

Black walnuts are not valued by their exterior size but by the size of the meats, which may vary a great deal from different trees. A nut dealer told me today of a new variety of walnut called the "Thomas walnut" which had thin shell and large meat and is in great demand. This dealer says he thinks farmers might profitably crack the walnuts at home and ship the meats only. He is paying \$1.35 per pound for black walnut meats now and only 7 cents per pound for the walnuts in the shell. When

the meats are taken out, care must be taken to prevent their heating and moulding, by removing them from the container and turning them over frequently.

Butternuts are valued also entirely by the size of the meats and some are hardly worth shipping. There is not much of a market in New York for filberts or hazelnuts.

Immediately before Thanksgiving is the best market season for hickory nuts and butternuts. Chestnuts sell all through the fall and winter. Black walnuts were first quoted in published wholesale quotations last year on November 19th when they sold at \$2 to \$2.50 per bushel.

All nuts should be shipped in clean, strong bags, preferably not too heavy, and of bushel or half bushel size, by second class express. Double cloth bags are often used. Some firms in the market will send bags without charge, for nuts shipped to them. Retail buyers prefer to get samples before making any offers.

Pecan culture not only takes us into the beautiful, healthful outdoors for exercise, but requires the activity of intelligence of the observing, experimenting and thoughtful type. Those who have tried golf, horseback riding, walking and the gymnasium have never found such health and keen delight as has the pecan enthusiast.—J. R. Moseley.

American Fruits Company's Library Opportunities

PRACTICAL BOOKS ON HORTICULTURE, NUT GROWING, NURSERY PRACTICE

Any of the following books will be sent on receipt of price by AMERICAN FRUITS PUB'G CO.,
123-125 Ellwanger & Barry Bldg., ROCHESTER, N. Y. Prices subject to change.

American Apple Orchard By F. A. Waugh.....	\$1.90	Insect Book—Dr. L. O. Howard.....	6.30	Parsons on the Rose—Parsons.....	1.75
American Fruit Culturist By John J. Thomas.....	3.65	Insects and Insecticides—Weed.....	2.15	Peach Culture—J. A. Fulton.....	1.65
American Fruit Farm—F. N. Thorpe.....	2.65	Insect Pests of Farm, Orchard and Garden—Sanderson and Peairs..	4.65	Peach Growing—By H. P. Gould....	2.65
American Grape Culture—Munson..	2.65	Irrigation Farming—L. M. Wilcox... 2.40		Pear Culture for Profit—Quinn.....	1.35
American Grape Growing and Wine Making—George Husmann	2.15	Irrigation for the Orchard—Stewart 1.75		Picturesque Gardens—Henderson....	2.25
American Horticultural Manual By Budd-Hansen, two vols.....	3.15	Land Drainage—Joseph H. Jeffrey.. 2.15		Plant Breeding—By Dr. L. H. Bailey 3.40	
American Peach Orchard—Waugh..	1.90	Landscape Gardening—Art of Land- scape Architecture—Parsons....	3.65	Plant Propagation; Greenhouse and Nursery Practice—M. G. Kains..	2.40
Bulbs and Tuberous-Rooted Plants..	2.15	Landscape Gardening—Downing's Famous Work—10th Edition— Revised by Waugh.....	6.00	Plant Physiology—B. M. Duggar....	3.00
Bush Fruits—By F. W. Card.....	3.15	Landscape Gardening—House and Garden's Book of Gardens, 9½ x 12½, 400 Illustrations.....	5.15	Pomology, Text-book of—Gourley... 2.75	
California Fruits and How to Grow Them—E. J. Wickson, A. M.....	4.15	Landscape Gardening Kemp—Re- vised by F. A. Waugh.....	2.15	Practical Forestry—A. S. Fuller....	2.15
Citrus Fruits—J. E. Coit.....	3.40	Landscape Gardening—Maynard....	2.65	Practical Fruit Grower—Maynard... 1.00	
Commercial Apple Industry of North America.....	3.65	Landscape Gardening—The Small Place—By Elsa Rehmann.....	3.65	Principles of Agriculture—Bailey... 2.00	
Cyclopedia of Agriculture By E. V. Wilcox-C. B. Smith....	3.75	Landscape Gardening—Plants for....	.85	Productive Orchard—F. C. Sears... 2.65	
Dwarf Fruit Trees—Waugh.....	1.00	Landscape Gardening—Cridland....	2.65	Principles of Fruit Growing—Bailey 2.65	
Farm Bureau Movement—O. M. Kille 2.15		Landscape Gardening—The Com- plete Garden—Albert D. Taylor. 6.15		Principles of Pruning—Kains.....	2.65
Fertilizers and Crops By Dr. L. L. Van Slyke.....	3.40	Landscape Gardening—O. C. Simonds 6.15		Pruning Manual—By L. H. Bailey... 2.65	
Fertilizers—Edward B. Voorhees... 2.65		Manual American Grape Growing— Hedrick	3.40	Putnam's Garden Hand Book.....	2.00
Field Notes on Apple Culture By Dr. L. H. Bailey.....	.90	Making Horticulture Pay—Kains....	1.90	Quince Culture—W. W. Meech.....	1.35
First Principles of Soil Fertility By Alfred Vivian.....	1.50	Manual of Fruit Diseases—L. R. Hessler, H. H. Whetzel.....	3.15	Roses—How to Grow—Robert Pyle. 1.35	
Forcing Book—By Dr. L. H. Bailey. 2.15		Manual of Fruit Insects—M. V. Slingerland, C. R. Crosby.....	3.90	Rose—H. B. Ellwanger.....	1.40
Fruit Growing in Arid Regions.... 2.75		Manuel of Gardening—L. H. Bailey.. 3.40		Sales Promotion By Mail.....	2.15
Fruit Garden—P. Barry.....	2.15	Manual of Tree Diseases—Rankin... 3.40		Small Fruit Culturist—A. S. Fuller.. 1.75	
Fruit Harvesting, Marketing—Waugh 1.90		Manual of Vegetable Garden Insects By Crosby & Leonard.....	2.90	Soils—E. W. Hilgard.....	4.25
Fruit Insects—Crosby.....	3.90	Manures and Fertilizers—Wheeler.. 2.65		Soils—Lyon-Fippin-Buckman	3.40
Fumigation Methods	1.90	Modern Fruit Marketing—Brown.... 1.90		Soils—F. H. King.....	2.40
Gardening for Pleasure—Henderson. 2.15		Modern Propagation Tree Fruits— B. S. Brown.....	1.65	Soils—By Charles W. Burkett.....	1.90
Gardening for Profit—Henderson.... 2.15		Nature's Garden—Neltje Blanchan.. 6.30		Spraying Crops—C. M. Weed.....	1.00
Grape Growers Guide—Chorlton.... 1.65		Nursery Manual—Dr. L. H. Bailey... 2.65		Standard Cyclopedia of Horticulture Edited by L. H. Bailey. In six vol- umes. 3,600 pages. 4,000 text engravings. 96 sepia halftones. 500 collaborators. May be had on installment payments.....	40.00
Grape Culturist—A. S. Fuller.....	2.15	Natural Style Landscaping—Waugh Manual Tropical and Sub-tropical Fruits—Popenoe	3.90	Strawberry in North America—S. W. Fletcher	1.90
Greenhouse Construction—Taft.... 2.40		Nut Culturist—Andrew S. Fuller.... 2.15		Strawberry Growing—S. W. Fletcher 2.40	
Greenhouse Management—Taft..... 2.40		Nut Growing: Latest Information; Guide to Propagating—By Rob- ert T. Morris.....	2.65	Success in the Suburbs—John R. Mc- Mahon	2.15
Hedges, Windbreaks, Shelters..... 1.00		Ornamental Gardening—E. A. Long. 2.15		Successful Fruit Culture—Maynard 1.75	
How To Grow Roses—Robert Pyle.. 1.35		Principles of Floriculture.....	3.40	Surgeon's Philosophy—Dr. R. T. Morris	3.15
Injurious Insects—F. L. Washburn.. 2.65				Systematic Pomology—Waugh.....	1.90
Insects of Economic Importance— Herrick	2.15			Ten Acres Enough—I. P. Roberts... 1.75	

A paper which gives the best value for the money to the reader will give the best value to the advertiser as well. I don't think there is any argument about the soundness of this view.—H. Dumont, Chicalo, Ill., in Printer's Ink.

WANTED Names and Addresses of Owners of Groves of Native Nut Trees in Northern States.

In the interest of Northern Nut Culture this Journal desires the above information to serve as a basis for extension of Nut Culture.

Readers will confer a favor by sending us lists of names and addresses of those who have stands of nut trees on their property, (with some account of productivity if practicable). Black walnut, English walnut, butternut, hickory, chestnut, filbert, etc.

American Nut Journal P.O. Box 124 Rochester, N. Y.

BUDED and GRAFTED Nut Trees

Start right with my hardy Pennsylvania grown trees and be assured of success. Attractive Catalogue Free.

I have this season a fine lot of stake trained Pecan, English Walnut, Black Walnut and Persimmon trees budded on root pruned transplanted stocks, that will please you and that will transplant easily and surely. Write for catalogue.

J. F. JONES, The Nut Specialist
LANCASTER, PA.

THIS SPACE
\$2.50 Per Month Under Yearly Contract
Under less than yearly term:
\$2.80 Per Month

GRAFTED PECAN TREES
ALSO BUDED ROSES and SATSUMAS
We Solicit Your Inquiries
Carol Plantation Nurseries,
THEODORE, ALA.

WANTED
BACK NUMBERS OF THE
AMERICAN NUT JOURNAL
Will pay 50c each for a copy of numbers 2, 3 and 4 of Volume 1.
Address X, care this journal.

CONSULTING TROPICAL HORTICULTURIST and TREE EXPERT

HARVEY C. STILES

COLUMBIA, TEXAS

Specializing in Pecans, Grapefruit, Avocados, and Landscape Development. Long experienced expert for—and present active director of—many such large projects throughout tropics and semi-tropics. Examinations, Reports, Plans, Specifications and Estimates. Correspondence suggested.

Have You Nuts to Sell?

HICKORY NUTS BLACK WALNUTS
BUTTERNUTS CHESTNUTS

Hundreds of buyers are asking where the nuts can be obtained in quantity. Place your Sale Advertisement in the AMERICAN NUT JOURNAL for quick returns. \$2.80 per inch.

39 State St., Rochester, N. Y.

American Nut Journal

**DEVOTED TO NUT GROWING INTERESTS
GENERALLY THROUGHOUT THE AMERICAS**

Vol. XVII, No. 6

DECEMBER, 1922

Per Copy 20c.

**SAN SABA EXHIBIT WHICH WON
GRAND CHAMPIONSHIP AT TEXAS PECAN CONGRESS**



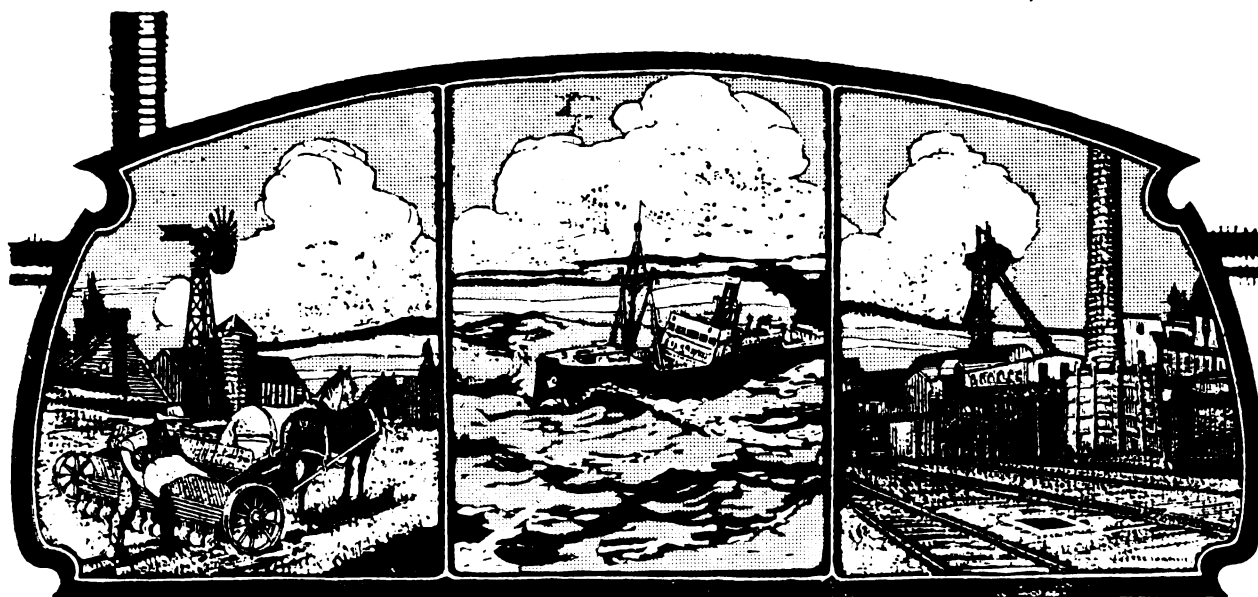
This exhibit was assembled by A. W. Woodruff, secretary of the San Saba Pecan Company, the San Saba Chamber of Commerce and County Agricultural Agent S. F. Clark. The display has taken first prize wherever shown. Dean Kyle, of the Texas A. & M. College, declares that the pecan was "hatched" in San Saba county.

39 STATE ST.



ROCHESTER, N. Y.

American Fruits Publishing Co.



ASK FOR POTASH

The present conditions in the business of the farmer and in the fertilizer industry call for serious thought. Both are going through a readjustment period, with its hardships and doubts.

The farmer may well ask whether he is using the most profitable fertilizer. The fertilizer salesman may well inquire whether he is selling the kind that will do the farmer the most good, and lead to larger sales in the future.

During the war America could not get Potash, and the use of acid phosphate increased. Central Europe could not get phosphates, and the use of Potash Salts increased. Today plenty of Potash can be had at less than pre-war prices. Now is the right time to restore the balance by using more Potash in the fertilizer formulas than the average amount used before, 5 to 10 per cent.

Crops take from the soil very much more Potash than phosphoric acid. On any soil where Potash has been profitable it is not unreasonable now to use at least as much Potash as phosphoric acid. Ask the fertilizer agent for prices on this kind of goods, and rebuild your soil while Potash is cheap.

Recently it has been shown that a lack of available magnesia causes serious injury to important crops on some soils. German Kainit and Manure Salts furnish this soluble magnesia without extra cost.

SOIL & CROP SERVICE, POTASH SYNDICATE

42 Broadway

H. A. HUSTON, Manager

New York City

Ask for POTASH—Buy POTASH—Use POTASH

**POTASH
PAYS**

AMERICAN NUT JOURNAL --- DECEMBER, 1922

EDITORIAL DEPARTMENT—Communications on any subject connected with Nut Growing and Distribution are cordially invited by the editor; also articles on this subject. We shall be pleased to reproduce photographs of trees of interest, methods and scenes connected with the Nut Industry; portraits of individuals, etc. Suggestions are cordially welcomed.

ADVERTISING—Advertising forms close on the 10th of each month. If proofs are wanted, copy should be in hand on the 1st.

Advertising rate: 20 cents per agate line; \$2.80 per column inch for any amount of space.

Advertisements that do not represent reliable concerns will not be accepted.

SUBSCRIPTIONS—The "American Nut Journal" will be sent to any address in the United States for \$2.00 a year; to Canada or abroad for \$2.50 a year. Three years: In United States, \$5.00; Canada, \$6.50.

Add ten cents for exchange unless bank draft, express or postal money order is used.

WHAT THIS JOURNAL STANDS FOR—Reliable information on all phases of the Nut Industry. It is for the advancement of Nut Growing in general; it is in no way confined to the interest of a particular kind of nuts, nor of a particular section. It is broad in scope and absolutely independent. The aim of "The American Nut Journal" is to stimulate thousands of persons into developing interest in one of the greatest food supplies of the future—to line the roadsides and fill the waste places with trees of a sort which yield dollars worth of fruit every year instead of the mere bunches of leaves resulting from present shade and ornamental planting. At the same time it will record the progress of the industry, the latest descriptions in the note book of the biologist and plant physiologist, the rapidly expanding knowledge of methods, the increasing acreage, and in short the news as it develops of an industry whose importance is recognized by an increasing number of persons in all sections.

Entered as second-class mail matter June 6, 1914, at the post office at Rochester, N. Y., under the Act of March 3, 1879.

AMERICAN FRUITS PUBLISHING COMPANY, Inc.

Ralph T. Olcott, Editor and Manager

121-123-125 Ellwanger & Barry Bldg., Rochester, N. Y.

Classified Business Announcements In This Issue.

Alexander Woldert Co.....	"Squirrel" Nut Cracker.....	85	Northern Nuts	Sources Wanted	88
Banning, H. M.....	"Pecan Villa" for Sale.....	85	"Nut Growing"	New Book	82
Bassett, W. W.....	Pecan Trees	86	Nut Information	Special Topics	75
Bechtel's Pecan Nurseries...	Grafted Pecan Trees.....	88	Nuts as Staple Food.....	Dr. J. H. Kellogg.....	75
California Ranch	Pecan Trees for Sale.....	85	"Nut Trees for the North".	Expert Advice	75
Carol Plantation Nurseries...	Grafted Pecan Trees.....	88	Simpson Nursery Co.....	High Grade Pecan Trees.....	86
Florida Nurseries	Pecan Trees	86	Soil and Crop Service.....	Potash for Crops	74
Griffing & Company, C. M....	Pecan Trees	86	Southern Nut Tree Nurseries	Pecan Trees	86
Indiana Nut Nursery	Northern Pecan Trees.....	86	Stiles, Harvey C.....	Tree Expert	86
Inter-State Nurseries	Pioneer Pecan Growers.....	86	Stone, B. W.....	Pecan Trees, Nuts, Groves.....	86
Jones, J. F.....	Grafted Pecan Trees.....	88	Texas Pecan Nursery	Budded Pecan Trees.....	88
Lancaster Nut Nurseries....	Northern Nut Trees.....	88	Wanted	Names of Grove Owners.....	88
Logical Market Place.....	For Selling Nuts.....	85	Wilkinson, J. F.....	Grafted Pecan Trees.....	86
			Woodruff, A. W.....	Texas Pecan Land for Sale.....	83

IMPORTS OF NUTS INTO THE UNITED STATES, FOR CONSUMPTION, DURING THE LAST THIRTEEN YEARS

(Compiled by Bureau of Commerce and Navigation, Department of Commerce, Especially for the "American Nut Journal.")

KIND	1909	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919	1920	1921
Almonds—not shelled.....	2,120,632	6,810,056	3,762,654	5,242,563	2,363,890	5,501,059	4,684,598	2,369,369	4,901,168	6,149,374	7,482,538	6,460,732	5,068,215
Shelled	8,538,054	10,495,750	12,160,649	11,692,938	12,655,057	13,896,621	12,168,153	13,210,668	19,160,258	21,544,757	28,007,908	18,769,626	21,572,634
Apricots and peach kernels lbs.		27,854	13,551	7,339	18,769	18,572	67,164	11,926	250,075			65,175	32,608
Coconuts in the shell.....	\$1,246,463	\$1,298,970	\$1,704,262	\$2,012,203	\$1,793,713	\$2,150,500	\$1,593,666	\$1,891,328	\$2,583,560	\$2,490,368	\$4,053,282	\$4,230,221	\$2,283,660
Coconut Meat broken or Copra not shredded, dehydrated or prepared.....	23,742,518	20,830,539	38,081,984	64,505,787	34,283,592	44,459,158	88,690,382	108,507,765	247,043,127	430,649,332	258,637,781	215,188,461	189,320,950
Dessicated, shredded, cut or similarly prepared.....	5,461,602	5,985,308	6,661,850	5,396,465	6,826,095	9,307,924	5,866,806	7,947,380	10,491,796	20,269,909	29,637,674	30,631,029	35,633,497
Cream and Brazil.....	409,644	461,496	277,679	a21,601,008	a11,933,139	a11,431,531	a21,483,319	a12,489,217	a16,243,023	a11,282,088	a43,076,348	a13,435,436	a37,102,046
Filberts—not shelled.....	7,365,837	10,026,961	10,084,987	8,375,800	8,586,278	10,366,072	10,003,552	16,468,547	7,432,524	16,747,349	14,863,364	14,092,336	14,092,336
Shelled	1,364,689	1,413,391	2,332,606	1,368,835	1,450,620	1,798,147	1,722,706	1,259,540	2,280,757	4,245,963	3,778,906	4,711,293	4,233,107
Marrons, crude.....		10,270,398	9,968,879	14,845,345	10,157,321	18,849,257	12,549,959	15,754,796	6,275,030		5,021,146	29,484,637	23,340,988
Olive nuts, ground.....	\$590	\$478	\$236	\$206	\$342	\$385	\$25	\$112	\$420			\$132	\$188
Palm and Palm Nut Kernels ..	\$2,752	\$6,907	\$5,744	\$7,970	\$4,872	a23,127	a31,900	a1,104,885	a626,435	a16,905,313	a5,610,056	a8,329,034	a230,194
Peanuts or Ground Beans.....													
Unshelled.....	7,326,371	11,297,172	11,055,823	12,660,433	12,140,612	17,298,778	14,075,387	9,623,411	7,710,062	1,970,797	5,867,354	7,222,486	4,803,677
Shelled	1,302,919	16,089,919	7,821,508	3,127,829	7,823,173	21,819,101	11,695,507	18,739,888	27,548,928	67,746,831	24,179,687	103,552,486	39,406,853
Pecans.....	1,490,289	3,349,460	2,333,037	2,607,227	1,803,434	2,621,161	2,032,539	1,265,382	4,076,833		2,194,620	1,062,390	1,062,390
Walnuts—not shelled.....	17,432,885	23,269,974	21,146,116	22,208,845	16,363,046	16,134,211	20,988,326	22,610,418	17,177,992	3,304,003	21,235,078	17,338,096	31,821,639
Shelled	8,781,908	10,960,988	11,244,054	10,713,286	10,093,622	11,636,053	10,532,956	13,445,790	12,257,593	9,707,401	10,260,989	13,972,917	18,264,069
All other shelled or unshelled, not specially listed	9,938,337	3,584,544	2,982,663	3,050,989	3,600,056	7,426,313	3,272,492	2,772,589	2,769,634			3,763,973	3,890,676
Total of nuts Imported Dollars	\$8,549,997	\$12,775,196	\$14,263,572	\$15,926,485	\$13,508,307	\$19,815,713	\$16,865,244	\$20,594,434	\$33,697,688	\$49,930,283	\$57,499,090	\$58,752,801	\$37,378,572

a—pounds.

Nut Culture Information

Reprint folders on topic discussed in American Nut Journal. 10 Cents Each

Grafting and Budding the Walnut—U. S. Dept. Agriculture.
 Pecan Areas of the United States—W. P. Reed.
 Walnut Trees For New England—Dr. Robert T. Morris.
 Some Walnut Varieties—Dr. L. D. Batchelor.
 Chip Buds For Nut Trees—Charles L. Edwards.
 Grafting, Budding, Topworking—Dr. W. C. Deming.
 Breeding Chestnuts for Disease Control—U. S. Dept. Agr.
 Advent of Nuts as Staple Food—Dr. J. H. Kellogg.
 Underworking Nut Trees—Charles L. Edwards.
 The Ubiquitous Black Walnut—T. P. Littlepage.
 Average Yield of Pecan Orchard in S. W. Georgia.
 Value of Nuts As Food—Dr. W. C. Deming.
 Improved Black Walnut a Good Investment—Henry Stabler.
 Status of Pecan Industry—C. A. Reed, U. S. Nut Culturist.
 Sources of Supply of Hazel Nuts—Bulletin Imperial Institute.
 Top-Grafting the Walnut Tree—Ferd Groner.
 Black Walnut As a Meat Producer—Henry Stabler.

Outline of Northern Nut Culture Activity—Dr. W. C. Deming.
 Establishing the Filbert Grove—George Dorris.
 Top-Working Northern Pecan Trees—J. F. Wilkinson.
 Nut Trees for Highways and Public Places—W. S. Linton.
 American Nut Culture—24-page Pamphlet Survey.
 East Texans Reap Fortunes on Pecans.
 Hazel Blight—Dr. Robert T. Morris.
 American Nut Industry—C. A. Reed, Nut Culturist.
 What Nuts to Plant in Northern States.
 Pecan Rosette; Practical Treatment—W. A. Weaver.
 English Walnut: Where To Plant It.
 Nut Tree Grafting by an Easy Method—Dr. Robert T. Morris.
 Purchase of Chestnut Tree With Reference to Blight—G. F. Gravatt.
 Quick Results in Pollenizing Pecans—E. E. Rislen.
 Nut Trees to Reduce Food Costs—Chas. Lathrop Pack.
 How To Guard Against Faulty Nuts—Harvey C. Stiles.
 The Romance of the Pinon Nut Industry in New Mexico
 Soil Fertility; Fertilizer Problems in Pecan Culture—J. J. Skinner, U. S. Department Agriculture.
 The Future of the American Grown Filbert—Richard H. Turk.

AMERICAN FRUITS PUBLISHING CO., 39 State Street, Rochester, N. Y.

TEN THOUSAND ACRES OF PECAN TREES IN MITCHELL CO., GEORGIA

J. H. House in Savannah, Ga., News

Mitchell county has approximately ten thousand acres in pecan groves with from ten to sixteen trees on each acre. The county produced last year about two hundred and fifty thousand pounds and these nuts averaged about forty cents a pound which brought into Mitchell county from nuts alone about \$100,000.

It staggers the imagination to think of an area of more than one hundred thousand pecan trees, but that is what is to be found in Mitchell county. The old "daddy" tree of them all still stands and lives on the old Bacon estate near Baconton. Nobody knows how old it is and nobody can estimate the pecans it has borne nor the number of twigs that have been cut from it for budding purposes. This old tree was the beginning of the pecan industry in this section.

Originally Mitchell county was a cotton county but now it may be known as a pecan county. Some of the most prosperous farmers in the county believe mightily in pecans. In the Baconton section in the northern part of the county, J. B. and J. R. Miller have thousands of bearing trees and a thriving Nursery. These young men started modestly along with others years ago and now they are proud possessors of groves that are valuable and beautiful. The Carvan Brothers have large groves that are bearing in large quantities. They are among the pioneers in pecan growing in this section. J. R. Pinson has a magnificent grove and sells his pecans on the trees to buyers. The Jackson Supply Company does a large business in pecan growing. Harry Jackson, another young man, gives all his time to pecan culture. Pierce Jackson, Jeff Glausier, John Glausier, Dunny Glausier and C. W. Brown own large groves and all their attention is given to pecans.

In the neighborhood of Camilla, Mrs. R. T. Cochran has thirty-five acres in bearing trees. Miss Laura Bennett, a business woman, has more than one hundred and fifty acres and ships large quantities to Northern markets. Right in the city of Camilla, Mrs. J. G. Stripling has a small bearing grove that is yielding satisfactory returns. W. L. Butler, president of the Bank of Camilla has a grove in town. J. P. McRee, a farmer of large holdings, has about one hundred and seventy-five acres in pecans and also has a large peach orchard for South Georgia.

Mr. McRee has a hundred acres of as fine peaches as grow in Georgia and these show the possibilities of peach culture as well as pecan culture in Southwest Georgia. Mr. McRee is experimenting by planting peach trees and pecan trees on the same land. It takes the pecans several years longer to come into full maturity than peaches and it is his idea to get the best returns from the peaches before the pecans get large enough to interfere with the peach trees and when the pecans come into full bearing he will cut down the peach trees. G. B. Cochran, a life-long citizen of Camilla, has a fifteen-horse farm and it has seventy acres of pecan trees. There are five hundred trees and two hundred and twenty-five bore five tons of nuts last year, which

he sold for forty cents a pound. On this same fifteen-horse farm, Mr. Cochran raised two hundred hogs with his own brood sows and had enough meat to supply the entire farm and sold \$1,500 worth of meat. He has on his farm right now two hundred and fifty hogs and he is feeding one hundred and ten on hard feed, getting them ready for the packing plant and one hundred and forty are ready to turn on the pea field to fatten up before they are finally fed hard feed, finishing them off for the market. Pecans, peas and hogs go mighty well together.

In the Camilla neighborhood, George Palmer, J. L. Palmer, Cook Gardner, B. C. Gardner, B. H. Jones and several other farmers have fine groves. The worst enemies to pecans are the case bearer and the web worm. The growers are experimenting now as to how to combat these pests. Seeing the possibilities of the pecan industry some enterprising men with vision have organized a company and have erected a pecan cracker at Baconton. Last season this plant cracked 150,000 pounds of nuts and they have increased the capacity of the plant so that they can crack a half million pounds this season. O. L. Williams, an associate of the Millers and Jacksons in the cracking plant has patented a cracking machine that has attracted the attention of several well-known machine manufacturers and he has been offered flattering prices for it and splendid royalties.

The packing plant takes the nuts and by machinery they are graded, cleaned, cracked and packed. Barrels of meats that are carefully halved are on cold storage at the plant ready for shipment to candy factories and bakeries for cakes. The demand for pecan meats is far greater than the present production and is growing more rapidly than the pecans can be produced. Other counties may have been depressed on account of hard times but Mitchell county has weathered the storm without a bank failure and without any cases of bankruptcy to speak of. There never was a brighter future for a county for substantial development in agriculture, dairying, hog and cattle production and pecan culture than there is for Mitchell county.

Texas Pecan Association Work

"Why is it that pecan growers get 8 to 12 cents a pound for their pecans and the consumer has to pay 35 to 60 cents a pound for the same pecans?" President H. G. Lucas, of the Texas Pecan Growers Association says that the answer is that pecans are dumped on the market as soon as gathered and sales are left to the numerous middlemen, each of whom takes a toll. The remedy, he says, is in co-operation by the growers in an association through which the nuts can be cleaned, graded packed, and stored, or shelled and sold direct to the trade; or, in case of a large crop, stored till a demand is found for them; for pecans can be carried over at small expense in cold storage without deterioration. The T. P. G. Association, with the aid of the Texas Farm Bureau and the A. & M. Extension Dept. hopes to handle the 1923 crop in this way.

San Saba Pecan Exhibit

The front cover page of this issue presents a view of an important exhibit of Texas-grown pecans arranged under the direction of A. W. Woodruff, San Saba, Texas, and others. In this exhibit there were some sixty-five jars of both budded and native pecans, a few jars of pecan meats and also a few jars of a new food product, "Pecan Supreme," which The San Saba Pecan Company is planning to put on the market. This exhibit first appeared at the Pecan Palace in Brownwood, Texas, last February and won five out of the six prizes offered, one Brownwood exhibitor winning first on native pecans. San Saba won first, second and third on budded varieties, and second and third on native varieties.

The following month the exhibit was shown at the Southwestern Exposition & Fat Stock Show at Ft. Worth, where it won the grand championship, blue ribbon and first money prize.

Following the successful Pecan Day on August 8th, the San Saba Chamber of Commerce invited Mr. Woodruff to appear at a meeting of the directors and present a plan for making a permanent exhibit to be owned by the Chamber of Commerce and kept intact as representing the pecan production of San Saba county. This he did.

A new San Saba county exhibit made up of 120 jars of pecans will be shown at the Horticultural Exposition, A. & M. College of Texas Dec. 19-20. It is believed that this is the first strictly county exhibit of the kind.

What Might Have Been

What happened thirty years ago in the heart of Texas is thus told in a recent issue of the San Saba, Tex., Star:

"Our friend W. B. Leverett got into a reminiscent mood last Saturday while in town and was telling us that when he came to this country he had a "vision" that the pecan industry was going to amount to something and he planted about twenty acres to pecans and they came up and thrived. Some of his neighbors who were much older than he, told him he had ruined his place and that it would be impossible to get rid of the pecan timber if he let them grow. He got a grubbing hoe and proceeded to dig up all the trees he had planted. There were ten or fifteen along the fence row which he could not grub handy, so he left them. This year he gathered from thirty to fifty dollars worth of pecans off each of the trees he could not dig up.

"He has it all figured out if he had left the original trees he would now have an income of from \$250 to \$300 per acre. Plant pecans and let the trees grow."

Mexican Pecans

On account of the shortage of the Texas pecan crop this season many pecans were shipped into this country from the pecan groves of Monterey, Linares, Bustamanta and Montemorelos, Mexico. They crossed the border at Laredo, Tex., consigned to San Antonio where they were reshipped to St. Louis, Chicago, New York, Houston, Dallas and Fort Worth.

THE FILBERT

The Barcelona Filbert

C. E. Schuster in Country Gentleman

LIKE all the other varieties of filberts tested by the Oregon Experiment Station, the Barcelona is a self-sterile variety needing some other variety to cross-pollinate it. At the present time the variety most generally used for this purpose is the Du Chilly. On this account one Du Chilly is planted to eight Barcelona trees, thus putting as a pollinizer every third tree in every third row.

Of the many varieties tried out the Barcelona is the most suitable. Other varieties may have better quality in the kernels, but not so many other valuable characteristics as the Barcelona. Among these properties, so essential to a commercial variety and possessed by the Barcelona, may be listed vigor in tree growth, heavy yield of nuts and the fact that it is self-husking. The last one is very important, as the cost of hand husking of many varieties is prohibitive and no machinery as yet is available for this work.

Filbert trees are propagated by layers. Budding and grafting are not successful enough to be resorted to on a commercial scale. Trees raised from seed act in the same way as with other fruits—practically being worthless and each one different from all the others.

The trees come into bearing at five to six years of age, when they can be expected to yield from two to six pounds a tree. One continually hears of trees that bear at two to three years of age, but it will be only an occasional nut and nothing that can by any means be classed as a crop. From this time they increase rapidly, and especially at eight to ten years of age is the yield mounting up.

Mr. J. C. Nibler, of Woodburn, Oregon, has 112 trees on his small place in connection with raspberries, blackberries, gooseberries, strawberries and several kinds of tree fruits. These 112 trees, making a little less than an acre as he has them planted, produced 2100 pounds at eight years, 2200 pounds at nine years, none the following year, due to the freeze of December, 1919, and over 2300 pounds at eleven years of age. When it is considered that the growers are receiving from twenty-five to thirty-five cents for filberts, it can be seen that a pretty income is coming to Mr. Nibler from a little less than an acre of land.

The initial costs of establishing an orchard are about the same as with other fruits. The trees this year cost from forty to sixty cents each. This will make the cost from twenty-seven to sixty-five dollars an acre.

Harvesting costs are very low. The picking costs about one and a half or two cents a pound. Drying is done very cheaply, as a very low temperature is used. Where artificial heat is used it will not be over 85 degrees, so the cost will be low, as the nuts are only dried for a short time. Most of them are dried by being placed in a room containing a stove and left for a couple of days.

There is no necessity for spraying filberts as yet, and this fact alone is making the growing of filberts popular in a country where apples need seven and eight sprays each year. Taken with the low cost of production and the regular crops, the filbert would appear to be one crop that, if properly located and carefully tended to, will be a support for one's old age and that of his grandchildren as well.

No Help Need Apply

To answer the many inquiries about "share gathering," we, the undersigned owning pecan orchards at and near Walker's crossing, Texas, on the Bosque river, have to say, we have found "share gathering" very unsatisfactory, and as our pecans are as much a commercial crop with us as our corn and cotton we provide ourselves with the necessary labor on our farms to gather our pecans. You will agree that a man with a corn or cotton crop to gather would be very foolish to depend on those who go to the country for "an outing" on holidays, Saturday evenings and Sundays, but we, with years of experience in gathering crops, believe such a man a Solomon compared to one who would try to gather a pecan crop that way.

To those who have it in their minds to go out and get "a few to eat" (without dividing with the owner), we have to say, we have our orchards enclosed, except a few trees here and there which we are guarding, and are depending on the following law for protection, to-wit:

Vernon's Penal Code, "Art. 1296. Gathering Pecans or Injuring Pecan Timber Without Consent of the Owner: Any person who shall, hereafter, gather any pecan nuts upon enclosed land not owned, leased, or controlled by him, unless it be made to appear in defense that it was done by the consent of the owner, lessor or person in control, or any person who shall cut, destroy or injure any pecan timber upon lands not his own, unless it be made to appear in defense that it was done with the consent of the owner thereof, shall be guilty of a misdemeanor, and upon conviction thereof shall be fined in any sum not less than \$5.00 and not more than \$300.00, or by imprisonment in the county jail not more than three months, or by both such fine and imprisonment."

We call attention to the fact that "to cut, destroy or injure any pecan timber," though it is not enclosed is a violation of the above statute, and will say that to thrash and chunk the limbs of a pecan tree is so injurious that it does not take much of such treatment to prevent it bearing the following year, and repeated thrashing will kill it. Would you take a pole and thrash the limbs of your peach or plum tree to get the fruit? The effect on the pecan tree is the same.

In conclusion allow us to assure those inquiring that we have plenty of help to gather our pecans.

Respectfully,

J. L. QUICKSALL, W. H. FORRESTER,
W. M. BEWLEY, A. W. SCALES,
URBAN ROOK, DR. B. F. CRAVEN,

At Valdosta, Ga.

Valdosta, Ga. Oct. 28—With only a small part of the pecan crop falling from the trees, two carloads of the nuts have already been shipped from Valdosta by local buyers. These shipments aggregate practically seventy thousand pounds of nuts, which perhaps brought an average of forty cents per pound or a total of twenty-eight thousand dollars.

Missouri Nut Crop

There is a plentiful crop of nuts in the state this autumn, according to E. A. Logan, statistician of the United States Department of Agriculture. Pecans, Mr. Logan said, have the greatest commercial value of any nut in Missouri.

Mr. Logan said that there had been some evidence of vandalism in the gathering of nuts in the state. He has found several instances, he said, where persons desirous of obtaining nuts without much trouble had felled the trees.

"All pecans in Missouri are from wild trees," says Mr. Logan. "A full crop would run from 30 to 35 carloads and are produced principally along the Mississippi river. Heavy shipments are made in a good pecan year from St. Genevieve, St. Mary's, Menfro, Caruthersville and Hornersville.

From Various Points

For uniform and true results plant grafted trees only. For new varieties plant seedling trees.

Middleport, O., Dec. 1—Hickory nuts and walnuts were shipped out of the Bend district this season by the carload.

A despatch from Mt. Vernon, Ind., states that in one week this fall Jarodski & Co., of that place, shipped 100,000 pounds of pecans.

D. D. Heinen, San Antonio, Tex., this season exhibited Stuart pecans grown in his 9-year-old, 30-acre grove 30 miles south of San Antonio, which averaged 28 to the pound.

Connersville, Ind., Dec. 9—Earl Pauley claims to have found the largest walnut produced in this community recently. It measures six inches in circumference.

A pecan tree in the front yard of John H. Lowe, on North Monroe St., Albany, Ga., is reported to have yielded 400 pounds of pecans this year.

Dr. A. H. Beazley, Crawfordville, Ga., is preparing to plant a thousand pounds of pecans this winter, for the purpose of raising young trees for the market.

New Haven, Ind., reports \$6,416 paid for nuts there Nov. 18th—all for pecans except \$200 in hickory nuts and walnuts. It is estimated the nut crop in that region is worth \$100,000 this season.

Every person having anywhere from half a dozen trees to commercial groves is being besieged by buyers seeking the product of the trees. New Orleans and Albany dealers are the most active in bidding to secure the crop. The prices quoted run from thirty-five to fifty cents a pound, which is topped by an average of five cents by the offers of local buyers.

Decatur, Ill., Dec. 1.—H. D. Spencer has had an exhibit of various kinds of filberts at the Farm Bureau building and says that several kinds of nuts, including budded walnuts, hickory nuts, pecans and filberts can be used successfully to make hilly and valuable. He says that the budded varieties are not to be compared with wild nuts, because they come into bearing much more quickly, and produce a better quality product than the common one found growing in nearby woods.

Greene county, Tenn., this season shipped 200,000 pounds of walnut kernels, according to a despatch from Greeneville. On one day late in October \$7,000 was paid out in Greeneville for the kernels. A good cracker can earn 40 cents an hour.

W. M. Spangler, 90 Plum St., Aurora, Ill., this fall offered a dozen two-year-old apricot trees and a dozen one-year old black walnut trees to anyone who would come for them. He had been reading of the Plan to Plant a Tree movement.

250 Pounds of Nuts on This Tree

Albany, Ga., Dec. 2—Notwithstanding the short pecan crop reported throughout this section, H. M. Nelms has a seedling pecan tree in the yard at his home southeast of the city, that has produced 250 pounds of nuts this fall. The nuts are not large, but are full of meat and excellently flavored.

Where May the Northern Pecan be Expected to Bear

Willard G. Bixby, Baldwin, Nassau Co., N. Y.

IN the January 1916 issue of the *American Nut Journal* is an article by Meredith P. Reed read before the Western Association of Nurserymen at their annual meeting in Kansas City, Mo., December 1915 entitled the Pecan Areas of the United States, describing the limits between which the pecan may be grown. In this paper the matter of the Pecan Belts of the country are discussed and their extent determined pretty largely by the length of the season (in average years), that is by the number of days between the latest spring frosts and the earliest fall frosts. A map was shown on which these areas were marked out, and it has been very useful to the writer in answering inquiries from persons who want to know if pecans can be grown in a given section.

Mr. John Garretson, Aspers, Adams Co., Penn., has on his place bearing Stuart and Schley pecans, two of the standard southern varieties. These bear nuts of typical shape but which are only fraction of the size that these nuts would be if grown in southern Georgia. This clearly shows that some of the standard southern pecans require something which they do not get at Aspers to enable them to properly mature their nuts. The trees stand the cold of winter but the fruit does not properly mature. Mr. Jones has suggested that it is heat that is lacking and has advanced the idea that even though the trees are hardy to winter cold they have not sufficient summer heat at Aspers to enable them to mature their crops. This has brought up the question as to whether there was any method of measuring the summer heat available for causing pecan nuts to grow and mature.

Observations on northern pecans (and some southern ones) on my place at Baldwin caused me to note that no pecans started to vegetate at Baldwin before May. May is the first spring month here when the pecan will leaf out. May is also the first spring month when the average monthly temperature here will reach 50 deg. F. It occurred to me that if we note the excess average monthly temperatures over 50 deg. and sum these items for a season we would get what might be termed a figure for "pecan growing heat units." This figure of 50 deg. is doubtless capable of some refinement. There is no reason to suppose that further study may not show that it should be somewhat more or less but it is the best we have so far and seemingly it is proving useful.

If we calculate these figures for Evansville, Ind., for 1914, for example, and show the method of doing it we will have

1914	Average Monthly Temperatures	Average Monthly Temp. in Excess of 50 deg.
January	39.6	
February	29.9	
March	42.0	
April	55.4	5.4
May	67.9	17.9
June	80.0	30.0
July	82.2	32.2
August	78.0	28.0
September	69.6	19.6
October	60.8	10.8
November	49.2	
December	31.0	

Total.....143.9

The pecan growing heat units, pecan units they may be called for short, for Evansville, Ind., in 1914 were 143.9. From this we conclude that a place where the pecan 1914 would figure out 143.9 would

be likely (as far as climatic conditions are concerned) to grow pecans as well as Evansville, that is of course if other years should show similar figures.

With the idea of seeing if the experience of those who were growing pecans would be anything like what might be calculated from the Weather Bureau records, letters were written to all members of the National Nut Growers Association to find out if pecans grew and bore well in their sections and if so which varieties. From the replies received it has been in a number of instances difficult to judge just how well pecans grow in some sections. For this reason I have interpreted the replies somewhat on the basis of my own knowledge and on certain facts told me by Mr. C. A. Reed. Apparently at least 175 pecan units are to be found in most places where the southern pecan is successful commercially. This

corresponds to a line through Augusta, Milledgeville, Macon, and Columbus, Georgia and Montgomery, Alabama. There seems little question but that pecans can be grown north of this line but until I get more positive information than I now have I shall doubt if pecan planting of southern varieties of pecans much north of this line is as nearly as advisable as it is south of it.

When we come to compare this figure with the pecan units for Ocean Springs and Pascagola, Miss., where a number of the fine southern pecans originated which are now being propagated we find an average of about 222 pecan units. To reduce this to a percentage we find that many of the standard southern pecans grow and bear well when the pecan units are as low as 79% of those of the place of their origin. In other words the adaptability of the southern pecan is 79%, that is it will grow and bear well where the pecan units are as low as 79% of



FIRST PROPAGATOR OF THE NOTED "MAJOR" PECAN
(The "Major" Pecan is pronounced by Col. C. A. Van Duzee, of Georgia, to be the finest of the northern pecans). J. Ford Wilkinson, proprietor of the Indiana Nut Nurseries, Rockport, Ind., standing before his two-year-old Major-budded pecan tree in nursery row, the nuts on which are the first to be produced by any person from buds from the parent tree. Nuts show plainly in the engraving.

those of the place of its origin or to use rough figures 80%.

When we come to ascertain the pecan units of the locations where the northern pecans grow and bear well we will consider Evansville and Vincennes, Ind., as places where it bears well; Burlington, Ia., as a place where it does quite well, but not as well as in Evansville; Clinton, Ia., as a place where trees are growing well but where they bear a large crop only once in several years and Charles City, Ia., as a place where the pecan does not mature its nuts. The pecan units are also shown for several important places outside of the native pecan area.

	High- est	Low- est	Aver- age
Evansville, Ind.	1919 147.5	1917 116.4	135.7
Vincennes, Ind.	1914 144.7	1918 123.1	130.8
Burlington, Ia.	1914 125.8	1917 90.2	108.4
Clinton, Ia.	1914 109.2	1917 75.3	94.9
Charles City, Ia.	1914 91.2	1917 65.4	78.5
New York City.....	1919 101.2	1917 85.2	94.3
Lancaster, Penn.	1919 108.7	1916 84.9	98.4
Gettysburg, Penn.	1914 108.4	1917 89.4	100.7
Cincinnati, O.	1919 131.7	1917 88.9	109.5
Baltimore, Md.	1918 127.2	1917 106.7	121.0
Washington, D. C.....	1919 126.8	1917 104.7	119.3
Hartford, Conn.	1919 88.9	1917 74.8	85.1

If we consider that Evansville and Vincennes are the center of the northern pecan district near which most varieties have originated and that a place should have 80% as many pecan units as in this Evansville district in order to have the northern pecan do well, a place should have 105 pecan units in order for one to feel reasonably certain that the northern pecan will do well there.

It will be both interesting and instructive to see how well the applications that may be made from the conclusions compare with observed facts. We know that there are large numbers of pecan trees at Burlington, Ia., and that the trees grow and bear well. Its pecan units are 108.4. We should conclude that at Baltimore and Washington with pecan units at 121.0 and 119.3 respectively that pecans would grow and bear well. There are pecan trees over 100 years old at Marietta, Md., which is



BIG PECAN TREE AT GRANDVIEW, IND.
Circumference nearly 16 feet. Largest in Indiana. J. F. Wilkinson at left, R. L. McCoy at right. August 19, 1914. Not now standing

half way between Baltimore and Washington. These trees bear nuts and although it has not been possible to get bearing records it is evident that they bear considerably, for on the roads of that vicinity are hundreds of young pecan trees which evidently came up from nuts borne by these old trees. We should expect the pecan to do well at Cincinnati, O. In fact I have been expecting to find it native there, but, so far all inquiries have failed to do so. At Fayetteville, however, which is about 40 miles east of Cincinnati and somewhat north of it, are bearing pecan trees raised from seed brought from Shawneetown, Ill., which is in the Evansville district. Seed from these Fayetteville trees planted at Baldwin have shown nearly 100% germination.

There is some question as to how well pecans should bear at Gettysburg, and Lancaster, Penn., and at New York City where the pecan units are much like those at Clinton, Ia., where, on forest pecan trees, we get a fair crop but once in several years. Perhaps with our present knowledge these places should be considered on the borderland between the country where the pecan is likely to do well and that where it will not mature its nuts. We know that pecan trees have borne nuts at Aspers, Pa., near Gettysburg, at Lancaster, Pa., and at West-

bury and Glen Cove, Long Island, near New York City, but so far it has not been possible to make sufficient observations to form definite conclusions as to what to expect. It seems quite likely that fertilization and care may help materially the maturing of crops in those sections which in our present knowledge we must consider on the borderland.

Probably we should not expect pecan nuts to be borne at Charles City, Ia., where pecan units are but 60% of those at Vincennes and pecan units at Hartford, Conn., are not so very different. There are northern pecan trees at Charles City, Ia., which many years ago were brought there, but the information I have about them is that they have never borne. There is a large pecan tree at Hartford, Conn., but I have never been able to learn of its bearing nuts.

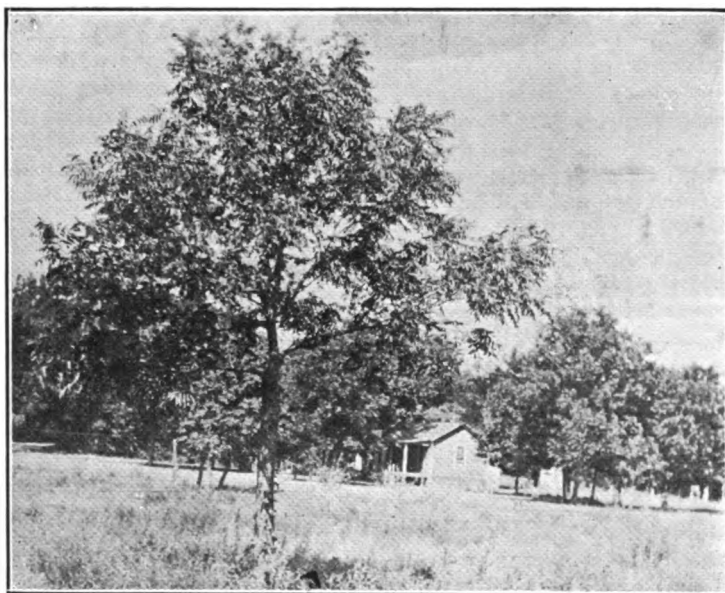
As the northern pecan trees now being planted get to bearing age we shall have actual experimental data as to what they will do in the different sections. Until that time by the method outlined herein and with the Weather Bureau records for several years at hand inquiries regarding its probable adaptability for a given section can be answered with far more confidence than was possible heretofore.

Pecan Meats In Demand

The Crown Brand pecan meats have been sold in practically every state of the Union. The Western and Pacific states, where little or nothing has been known of the cultivated pecan, have been large buyers of these meats. Large shipments have gone into Los Angeles, Cal., the home of the California Walnut Growers' Association. The association at Putney will buy many nuts in addition to its own crop this fall and winter, in order to be able to supply the demand for meats in cans and jars.

Stanley Walbert, Columbus, Kansas, has planted 450 pecan trees on an 11-acre tract near that town, on the Scammon road.

Willard G. Bixby, Baldwin, N. Y., on account of pressure of other business, has asked the Northern Nut Growers Association to relieve him of the duties of treasurer which he has performed for some time. He suggests that Dr. Deming's title of secretary be changed to secretary-treasurer.



Topworked Native Pecan, Sperry, Okla. (To Halbert variety). Four years from graft. Entire growth from single bud

American Nut Journal

COVERING NUT CULTURE

NORTH—SOUTH—EAST—WEST

AMERICAN FRUITS PUBLISHING CO., INC.
80 State Street - Rochester, N. Y.

RALPH T. OLCOTT, Editor and Manager
Official Journal Northern Nut Growers' Assn
Official Journal National Nut Growers' Assn

SUBSCRIPTION RATES

One Year, in advance.....\$2.00
Canada and Abroad.....2.50
Single Copy......20

ADVERTISING RATE

Per column inch.....\$2.80
Forms Close 10th of each month

ROCHESTER, N. Y. DEC., 1922

NUT ASSOCIATIONS

California Almond Growers' Exchange—
President, G. W. Pierce; manager, T. C. Tucker, 311 California St., San Francisco.

California Walnut Growers' Association—
President, C. C. Teague; secretary, W. T. Webber; manager, C. Thorpe, 1326 East Seventh St., Los Angeles, Cal.

Georgia-Florida Pecan Growers Association—
President, J. M. Patterson, Putney, Ga.; vice-pres., A. C. Snedeker, Blackshear, Ga.; sec'y-treas., J. S. Wight, Cairo, Ga.

National Pecan Growers Association—
Prest., Charles A. Simpson, Monticello, Fla.; vice-pres., J. M. Patterson, Putney, Ga.; and E. C. Butterfield, Winona, Tex.; secy., J. Lloyd Abbot, Spring Hill, Ala.; treas., J. Slater Wight, Cairo, Ga. 1923 meeting, Jacksonville, Fla., Oct. 2-4, 1923.

National Pecan Growers' Exchange—
President and manager, William P. Bullard, Albany, Ga.; vice-pres., J. B. Wight; secy-treas., A. D. Galt.

Northern Nut Growers' Association—
President, James S. McGlennon, Rochester, N. Y.; vice-pres., J. F. Jones, Lancaster, Pa.; treas., Willard G. Bixby, 32 Grand Ave., Baldwin, N. Y.; secy., Dr. W. C. Deming, Georgetown, Conn. 1923 convention, Washington, D. C., Sept. 26-28

Southeast Georgia Pecan Association—
President, Dr. W. H. Born; vice-pres., Col. G. H. Harris; secy., J. H. Girardeau, McRae, Ga.; treas., E. F. McRae.

Texas Pecan Growers' Association—
President, H. G. Lucas, Brownwood; vice-pres., John P. Lee, San Angelo; Secretary, Oscar Gray, Waxahachie.

Western Nut Growers' Association—
President, Ferd Groner, Hillsboro, Ore.; secy-treas., C. E. Schuster, Corvallis, Ore.

A Ballad of San Saba Land

"The Legend of the Pecan" is the title of a ballad by Genie Griffin DeWolfe. It comes to our desk from the San Saba, Texas region. It relates the story of a tiny elfin, in the dim primeval forest, eons ago, named Pan Pecan "who was favored of the fairies:"

All the gods agreed to help him
and they gathered every kind
Of delicious nut and made them
into one—of all combined!
With that nut Pecan then journeyed
to San Saba valley grand
Planted it and stayed beside it
till it flourished through the land.

A number of Savannah, Georgia, people have become interested in pecan raising and are setting out pecan trees this year. Thomas A. Jones, Girard M. Cohen and Mills B. Lane have arranged to set out pecan trees and also Satsuma orange trees purchasing the trees from the Nursery of A. Clarke Snedeker, well known pecan and orchard specialist of Waycross. Mr. Lane has already raised both pecan trees and satsuma oranges on his farm at Lebanon.

If it relates to nut culture it should be in the AMERICAN NUT JOURNAL. Please send it in.

SOME DAY; WHY NOT NOW?

Miami, Ottawa county, Oklahoma, last month reported that farmers throughout the county were "making money picking up pecans on their land and marketing them." Pecans were selling readily at 20 cents a pound, "and there is an abundance of them."

Here then, is the case of farmers harvesting what the squirrels planted for them years ago. The remarkable thing is that farmers would not think of sitting tight waiting for bird or animal to plant their grain fields, apple orchards and vegetable gardens. Slow indeed, are they to beat the squirrels to it and to apply human intelligence by planting nut trees in orchard form as they do other trees and plants and seeds, using improved varieties and "making money picking up pecans on their land and marketing them," to the tune of 50 to 70 cents instead of 20 cents a pound.

In the busy hives of industry in the crowded cities, toward which farmers and farmers' sons are drifting, it is doubtful that such an opportunity for successful endeavor awaits many. The lecturers of the Northern Nut Growers' Association and the literature of the National Pecan Growers Association and the Western Nut Growers Association are doing what they can to stir into action.

It would seem that there is a fine field for the activity of the vice-presidents for Oklahoma of the Northern and National Associations in the way of bringing home to these Ottawa county farmers the marked advantage of Nut Culture.

It would seem, also, that the chance to pick up nuts to sell at \$50 to \$70 per cwt, as against \$20 would be inducement to effect organization of a state branch of the Northern and National Association in Oklahoma with a definite program for development.

SOME PECAN BUSINESS IN KANSAS

C. B. Buvinger, Chetopa, Kan., on Nov. 18th bought 25,054 pounds of native pecans in his district for which he paid \$4,634.99 in cash. The Chetopa Clipper says:

"In four days he bought 40,000 pounds which is sure some pecans, as 30,000 pounds is considered a carload. Mr. Buvinger is now shipping his fourth car load of pecans, and these were all large cars, being a 50 per cent overload, or 45,000 pounds. Mr. Buvinger also bought a little other stuff Saturday, and in addition to the \$4,634.99 paid for pecans, bought grain, poultry and live stock amounting to \$6,000.00, or over \$10,000.00 in all, for the day. We heard it jokingly remarked that there wasn't a merchant in Chetopa had any money left Saturday evening, as they used it all cashing Buvinger's checks."

But on Nov. 24th Mr. Buvinger is reported to have bought and shipped 20,152 pounds of pecans for which he paid \$3,627. Mr. Buvinger may be considered the Kansas Pecan Exchange. Chetopa is just across the Oklahoma frontier in Labette county.

Running the eye over a number of exchanges it would seem that it is next to impossible for the weak-minded who are permitted to edit the rural press to refrain from thinking of other imbeciles whenever a nut is referred to. Here is one of a thousand samples:

The nut crop of southern Indiana is exceptionally large this year. No we don't refer to the variety that is found in insane hospitals, state legislatures or other public places, but those that grow on shell-bark hickory and black walnut trees.

AMERICA WILL HAVE TO HURRY

A record of the triumphant march of civilization is contained in a report just received by the U. S. Department of Commerce from Vice-Consul Mosely of Sydney on the commerce and industries of the Fiji Islands. Instead of commerce being carried on in war canoes and the industries consisting principally of head hunting, we learn through Mr. Mosely that a sugar industry has been developed to a high degree of perfection. And monkeys are no longer hurling coconuts from the tree tops at dusky natives, for coconut growing has been reduced to a science and the groves are carefully cultivated and protected. Fiji has a coconut oil factory.

The Northern Nut Growers Association hopes at least to keep pace with the Fiji Islanders, but American planters will have to hurry. We are only just able to say that nut growing in the Northern states "has been reduced to a science" and that groves are carefully cultivated and protected.

THE JOY OF A LIFETIME

When you plant a nut tree you've planted something. Frank M. Clark, Richmond, Ind., late in October of this year picked a basketful of hickory nuts from the same trees from which he gathered nuts as a boy 75 years ago! The trees are in Union County, near Dunlapville. Mr. Clark says that Oliver Test, of Richmond, gathered nuts from these trees 80 years ago.

Young and old can well afford to plant nut trees and care for them. The hickory trees above referred to are among the comparatively few that escaped the axe. Mr. Clark's experience might have been that of many others, had the trees been spared.

During October in several newspapers T. N. Witten, Trenton, Mo., advertised the sale of Missouri large shell bark hickory nuts. The advertising appeared in the Minneapolis Journal, Kansas City Star, Omaha World-Herald, Detroit Free Press, Elks Magazine, Printer's Ink, Hardware Dealers Magazine and Saturday Evening Post.

One hundred and fifty dollars is the return W. M. Bladen, of Hebardville, Ga., received from a shipment of nuts sent to Albany, Georgia recently, as the profit per acre of his grove. Mr. Bladen has a 12 year old grove and he expects its value and productivity to increase from year to year. The pecans were shipped wholesale.

Charles Trunk & Sons, Dayton, Ore., who hold the largest acreage owned by any Oregon grower of English walnuts, harvested approximately 25 tons. A larger percentage of their nuts were more discolored this year than ordinarily owing to the excessive fogs during harvesting time. The quality, however, is very good.

In the Rarolonga, the most populous of the Cook islands in the Pacific ocean, it is provided by law that the head of each family shall plant and cultivate a coconut tree for each year of a child's age until the child is old enough to plant trees himself. It is almost needless to add that the island is noted for the abundance of its fine coconuts.

The N. Y. Journal of Commerce notes that the style in pecans is changing. The red polished Mexican pecan is no longer desired. Texas pecans in natural shades are preferred.

Just mention AMERICAN NUT JOURNAL.

Nut Display at Mid-West Exposition

S. W. Snyder, Center Point, Iowa, a director of the Iowa Horticultural Society, and an active member of the Northern Nut Growers Association, was in charge of the Nut Exhibit at the Mid-West Horticultural Exposition in Council Bluffs, Ia., Nov. 13-19, 1922. He writes:

"The nut display was very much better than that of any previous exposition. There were on display sixteen varieties of filberts; twenty of black walnut, ten of white walnut or butternut; twelve of pecan, all Iowa grown; five of hazelnut; seven of Persian walnut, the Pomeroy being the best of the lot; seven varieties of hybrid hickory and pecan; twenty of shag-bark hickory; five of shell-bark hickory, nineteen of almonds, ten of chestnuts; three of chinquapin, and one of peanut. The attendance was very good, and seemingly there was more interest manifested by visitors in the nut display than in any other department of the exposition."

Commercial Nut Culture in U. S.

From U. S. Dept. Agr. Year Book 1921

Only three kinds of nuts are produced on a commercial scale in the United States—pecans, walnuts, and almonds. The pecan is native to the lower Mississippi Valley, and the largest acreage is found in a belt which extends from central Missouri across Oklahoma to south-central Texas. Recently extensive planting of pecan trees has taken place on the coastal plain in Georgia, the Carolinas, Alabama, Mississippi, and northern Florida. Almonds and walnuts have been introduced from the Mediterranean region and their production is practically confined to California, except for a considerable acreage of walnuts in the Willamette Valley of Oregon and adjoining counties in Washington.

Place To Grow Black Walnuts

Rogersville, Hawkins Co., in Northeastern Tennessee, claims the distinction of being the largest black walnut kernel market in the country. In two weeks this season the merchants have shipped out kernels at 55 cents per pound, to the value of \$18,000. The later price will be 35c. The kernels go mainly to eastern markets, for confectionery and baked goods. The crop was only fair this year. A large crop comes once in five years.

On one farm in Caney Valley there are 150 trees, yet this large orchard will not produce more than 50 bushels of hulled walnuts.

The time may come when a cultivated, or improved, walnut may be planted out for nut bearing in the county to good advantage. The rich limestone blue-grass lands produce more black walnut trees perhaps than any East Tenn. section. Thousands of families get a nice livelihood out of collecting and marketing the kernels.

Pecans Hurt by Rains

Advices from Albany, Ga., are to the effect that the pecan crop has been injured by excessive rains. The kernels of the nuts are discolored with black spots which cannot be detected until the nuts are cracked. On low land the damage is pronounced. Nuts from well drained areas are being harvested separately to take care of the trade which is looking for the best stock.

A pound of Brazil nuts yields nine ounces of oil, used by watch makers and artists, and to some extent for cooking.

The Round Table

Rumblings and Grumbings

Of a Short Distance Rambler—Not Presaging Any Chilean Earthquake, Nor Much of Anything Else, So—

I have just brought up from the cellar—no, not what you are guessing, but a small basket of Stabler and Royal walnuts, and cracked them with a hammer, and I will praise and criticise, accordingly to my poor but best judgment.

I should say here that an extremely dry and quite hot July and August has contradicted former experience with most kinds of fruits and nuts. Blackberries and raspberries were half the normal size, most, (not all), varieties of peach and apple, ditto. Pears were larger and better than usual in the Kieffer, Garber and Lincoln varieties, but much smaller in the Seckel, Tyson, Suduth, Jap, seedlings, etc. Gooseberries and currants were very small, and Eleagnus edulis large. Quinces were half size; garden stuff mostly a failure, except what matured early.

So, any description of any variety needs to be accompanied by two "grains of salt." Many nuts of various kinds were small and failed to fill out properly—as black walnuts, butternuts, pecans, hazel nuts and chestnuts, including Van Fleet hybrids and the chinquapins. The Royal, Burbank's hybrid, never has borne a full crop here. The tree is upright and tall, but in girth of stem it is somewhat smaller than J. nigra. The nut is a little smaller than Thomas, as I have it, of good regular shape. The cracking quality is medium, and it has none of the rather rank and peculiar flavor of the ordinary black walnut. Also it usually "fills out" fairly well. But this year fully half were not "filled," just a shrunken skin there only; and the same may be said of the Stabler. But this defect may not be permanent.

Stabler seems a deformity in tree and nut. Unlike most black walnuts, it throws out a myriad of limbs near the ground with a spreading and drooping rather than an upright growth, and its small leaves, (except the odor), give but little resemblance to our J. nigra.

The nut being irregularly oblong, pointed at both ends, does not seem to give it the "cracking quality" that I expected. Parts of the shell are thin and break easily, but parts are thick and stubborn under the hammer. I failed to see the meat rolling out "whole or in halves" as I expected to. I think the eating quality about average. It seems to be an early bearer and promises productiveness.

As to the Thomas, as I have it, it is a large and good variety, but not better than I have seen before growing on our creek

bottoms where they have reached a 5-foot diameter in a few places.

Chestnuts, too, have behaved queerly. I have said that the Boone chestnut was "just as reliable as corn in Illinois." But, this year the few burs that opened gave only half-sized nuts and nine-tenths did not open at all—the bur withering on the trees and clinging tight to the insignificant, worthless nuts. This was most noticeable on the largest trees, some small young trees being nearly normal.

Riehl's Fuller seemed not much affected by the drouth (maybe it is a disease), and Buckman from Col. Endicott was in better form than usual. Rochester failed like Boone, and the American native planted 40 years ago was only one-third of usual size. We have no chestnut bark blight that we know of, and no weevil, so far.

It is disgusting to have to unlearn the lessons that we were sure we could score a full 90 grade on a brief year ago.

BENJ. BUCKMAN.

Farmingdale, Ill.

How Shall the Rate of Liming Be Determined

For anyone who is acquainted with the variation of the acidity of the soil and also the variation of the range of acidity between different soils, it is manifestly impracticable to say that for any general condition, a certain fixed amount of lime should be used. The most practicable method for meeting this situation that has come to the front, is that of Dr. Hartwell, Director of the Rhode Island Agricultural Experiment Station, which he set forth in a paper given before the American Society of Agronomy in Springfield, October, 1920.

For example, a crop such as corn, having a low requirement for lime, would probably not need an application of lime on the soil having a low to medium lime-deficiency. On the other hand, corn would benefit from a small to medium application of lime on a soil of high acidity. Again, alfalfa, having a high requirement for lime would need a medium application on soil of low acidity. For southern New England, he suggests that small, medium, and large applications of lime might be designated 1,000, 2,000, and 3,000 per acre of calcium carbonate in finely pulverized limestone. In such material, all of the lime is presumed to be available in a rotation and corresponding amounts of burnt lime would be approximately half those amounts, depending somewhat on purity.

A. Pearlman, Valdosta, Ga., has shipped an aggregate of two carloads of pecans, 70,000 pounds, this season in small lots.

On November 1st report was made of the first shipment of new crop pecans received on the New York market.

Just mention AMERICAN NUT JOURNAL.

BIG WALNUT TREE READY FOR VENEER SAW

The largest walnut tree cut for veneer in Indiana in recent years is ready for the saws at Grafton Johnson's veneer plant in Edinburg. The tree came from near Dupont and has aroused the interest of all southern Indiana log buyers. The old time veneer men at Edinburg, who have been in the game for years, say the tree is the largest walnut they have ever seen. Although the huge logs are perfectly sound and of unusual value, the stump is a big prize. It is a curly walnut of gentle wave and the veneer sawers at the plant estimate that the

stump alone will cut out \$3,000 worth of veneer. If it is as sound and as "curly" as the surface indicates, the retail value of the veneer may go as high as \$4,000.

There are now in storage in the Johnson yards at Edinburg \$25,000 worth of walnut logs waiting for the veneer saws. With the new ten foot rotary the plant will have a capacity of cutting approximately \$10,000 worth of raw logs every month. Of course the value of \$10,000 of logs in the yards is multiplied many times when they leave the plant in the form of high grade veneer.

A FEW OF THE NUT GROWERS NEEDS

By President Theo. Bechtel, Ocean Springs, Miss., at Annual Convention National Nut-Growers Association, Mobile, Ala.

As I have taken the subject "A Few Needs of the Nut Growers," I will make these remarks with a suggestion or two, which I hope you will all think over, and while so doing add further suggestions, as to how we may meet these needs. I am aware that there will be a great difference of opinion as to which is the most crying need of all of our many necessities. Personally, and I am sure that at least ninety per cent of those present will agree with me, I am convinced that thorough and harmonious organization is the most essential of all of our needs. Why? Because through it we can obtain practically all the other requirements to successful nut culture. Some of you may think this is rather a broad statement, but when you analyze it you will doubtless agree with me.

This, the 20th annual assembling of the members of the National Nut Growers Association, I believe will mark the beginning of an era of greater prosperity among those engaged in this business of producing one of the choicest and most valuable horticultural products that man has ever undertaken to commercialize.

It hardly seems possible that twenty years have elapsed since we had the organization meeting of this Association at Macon, Georgia, and as I look over this assembly of enthusiastic and hopeful nut producers there will be seen but few of the faces of the old guard. However, I believe we owe much to those who were the prime movers in organizing this association, as the benefits are further reaching than we can enumerate here.

This organization in my opinion has already supplied many of the greatest needs of the industry, or rather its followers, and to a greater extent and more efficiently than could have been attained in any other way. Just suppose for a moment if you can how far along any one of us would have gotten alone, with all the problems that have been thrashed out among the members of this Association in the last twenty years. Many things which seemed very serious problems to us twenty years ago are now handled with the greatest of ease. When we consider how little practical knowledge had been disseminated at that time, we must acknowledge that the pecan industry has made most wonderful strides within this period, much of which advancement is due to this Association. Today the beginner may attend these conventions and obtain the benefit of the experience of several hundred members covering a period of many years, can obtain knowledge which would likely take him a lifetime to acquire through his own experience. I believe horticulturists as a rule are a very generous and free-hearted people and impart their knowledge and experience in a free-handed manner. As we all know, some of our knowledge has been acquired through very expensive experience.

Thorough and efficient organization and co-operation is as much needed today as it ever was, and is something in my opinion that always will be needed. Knowing this as most of us do it is hard to understand why we are not already more thoroughly organized and why the attendance at these convention meetings is not much larger than it is. Individually we can not afford to stay away from these meetings. I believe the moral support alone that we receive from mingling with those who are interested in the same undertakings with us and comparing notes, many times repays us for all the expenses of attending these conventions. We all know that this very faith in the business thus attained is the greatest essential of all, for without it we do not even seek the knowledge, which is most essential after our minds are fully made up that there is something really worth while in the business

of nut culture. Without thorough organization it is difficult to disseminate practical experience, secure government aid in experimental work, obtain and compile statistics and do many other things too numerous to mention, all of which are of the utmost importance to the success of the industry.

Suppose then we each and every one of us make up our minds that we will do our bit towards making the membership reach the 1000 mark before we meet a year from now. There certainly must be one thousand individuals among the many thousands engaged in the business sufficiently interested in nut culture, whom we can convince of the benefits of organization. If I might suggest a slogan for this meeting I would say let it be "1000 members for 1922." A thorough organization of the nut growers would in my opinion make it easier to attain a thorough and efficient marketing organization, which I am sure the most of us are aware will be a great necessity as the volume of nut production increases through the assistance and efforts of the National Nut Growers Association. I am, however, of the opinion that the two organizations have their distinct and separate duties and missions to fulfill, and should be kept entirely separate, since each organization will have all it can do to look after the interests of its own members, and there will always be members of this National Nut Growers Association who will not need the services of a selling organization for several years while they are developing young orchards.

As stated earlier, I trust you will add to these suggestions and all co-operate in working to make the National Nut Growers Association a greater and more efficient organization and a national force in the development of the nut growing sections.

In conclusion let me say, we will now begin a program, which I am sure you will agree is well worthy of your consideration. I wish to call your attention to the fact that this gavel which I hold in my hand is made of pecan wood grown in Oregon, and is presented to this Association by Mr. H. A. Henneman, President of the Western Walnut Association. Mr. Henneman expresses his regret at not being able to attend this meeting and extends a cordial invitation to us to come to Portland, Oregon, in 1925 to attend the Worlds' Convention of Nut Growers, which they propose to hold there in connection with an international exposition planned for that year. I hope to have the pleasure of attending that convention and meeting a strong delegation of members from this Association.

Nut Prices High in Italy

Italy's 1922 almond crop has proven excellent and will probably reach about 15,000,000 kilos, says Consul E. I. Natuan, Palermo, in a report to the Department of Commerce. Filberts are a disappointment, owing to heavy frosts and winds during the flowering season, and will not exceed 6,000,000 kilos. Two million kilos of last year's filberts are still on hand, and not more than 500,000 kilos of almonds; 33,600 kilos of pistachios are expected. Prices of almonds will remain high for some time due to the heavy commitments of some of the largest exporters in Sicily, who speculated on old stocks. Owing to the small carryover these commitments will have to be met from the new crop.

If it relates to nut culture it should be in the AMERICAN NUT JOURNAL. Please send it in.

Delights of the Pecan

J. R. Moseley, Byron, Ga., in the leading editorial of the Oct. 28th issue of the Macon Telegraph, urges greater planting of the pecan, emphasizing the pleasure to be derived therefrom. He says:

Most of the literature on the pecan has dealt with its horticultural and commercial aspects; it is the purpose of this editorial to deal with the delights that come with the planting or the transplanting of the first tree with one's own hands, with the first swelling of buds and the first fruiting of the tree, with the first sight of grown, opening nuts, with the first nut eaten and the first nuts shared with friends, with the first money in one's hands from a pecan sale; with the exquisite pleasure that comes from working and loving the pecan tree, of witnessing its growth and habits, of seeing it laden with heavy crops of perfect nuts, of deriving keenest pleasure from their taste and vigor and health from their substance and a measure of profit from their sales and large expectations for the future. While there is joy in all healthful activities that are not carried to the point of exhaustion, while there is lively delight in dealing with with and aiding all growing things, especially in God's great outdoors, while all things of use and beauty create sensations of pleasure and emotions of joy, there is that about the pecan that creates that combination of pleasure and joy that we might rightly call keen delight.

Nut Crop Worth More Than Apple Crop

The nut crop—horticulturally speaking—this year is one of the most bounteous in the history of the North Country. Every variety—hickory nuts, butternuts, chestnuts, beechnuts—is plentiful, trees being laden,—says a Watertown, N. Y., paper.

Motorists have made huge inroads into the supply, usually with the permission of the owners of the land, but often without. Most farmers do not regard the nut crop as part of the income from their farm and so no serious attempt is made to keep away parties seeking a few for winter use.

"My chestnut crop has been worth more than my apple crop this year," declared one woman, residing near Orwell who sold to one store in Watertown more than \$40 worth. "Apples have been plentiful and the demand light, but the market for chestnuts has been good. In one week I sold \$65 worth. What are not bought in Watertown and surrounding cities and villages I ship to New York, where the demand is good and the price stays up."

C. B. Borer, Centerville, Md., contemplates planting nut trees on 25 acres of silk loam in a section practically surrounded by salt water.

If it relates to nut culture it should be in the AMERICAN NUT JOURNAL. Please send it in.

A NEW BOOK! NUT GROWING By Robert T. Morris

The latest and only up to date book on the newest and one of the most important branches of Horticulture, giving a broad survey of a rapidly growing industry. Detailed explanation of successful methods of propagation and the new process of grafting with the use of paraffin; illustrated.

An invaluable work for all nut growers.

Price. \$2.65, Postpaid

AMERICAN FRUITS PUB'G. COMPANY
39 State Street, Rochester, N. Y.

YOUR BUSINESS ANNOUNCEMENT

Can be kept standing in the columns of the Official Journal the year around at a cost of less than 60 cents a week! Write for particulars.

AMERICAN NUT JOURNAL, Rochester, N. Y.

One City's Opportunities

In an address on "What Rochester Teaches," before the Rochester, N. Y. Academy of Science, Botanical Section, Henry Hicks, of Hicks Nurseries, Westbury, Long Island, said:

"Miss Beckwith, your president, has asked me to speak on the vegetation of the Hempstead plains, Long Island; but I am going to tell first what the Rochester parks teach.

"You have the greatest collection of species of food plants in the world, apples, crab-apples, hawthorn, plum, and many others. A similar collection is in Arnold Arboretum, Harvard University, a part of the Boston park system. Your collection has greater opportunities because of your larger area and more generous support. The Arnold Arboretum has given you carloads of its rare plants.

NEW FRUITS

"Man must live from plants, the food plants of birds, squirrels, mice, deer and fish. The scientists tell that the fish feed on aquatic plants. You will start plant breeding to develop new and better varieties.

"The hawthorn is now known to consist of hundreds of species, many discovered by Rochester botanists. The hawthorn may be an important food supply for jelly and fruit juice. In China there are hawthorn orchards like your apple orchards.

"Your park department did an unusual thing; sent a scientist, Mr. Slavin, to Texas for new species of plums. You now have valuable new hybrids originated in your parks.

"Through the discovery of Mendel's law by an Austrian Monk of that name, it is possible to quickly combine the valuable qualities of different related species and varieties of plants and animals. You have in Rochester the greatest collection of parent stock from which to breed.

NEW NUTS

"In Riverside cemetery is the Laney hickory, named for your park superintendent, a natural hybrid of the shagbark and the bitternut hickories. It is large, thin-shelled and sweet. They are manuring it to get various scions to propagate.

"The American Nut Journal is published in Rochester. It teaches that some parts of the world more food comes from trees than from animals and animal crops.

"Ellwanger & Barry introduced an improved black walnut. Nut breeding can be done here; and it should be done in each region, as in Virginia, Indiana and Texas.

"You have in Vollertson's Nursery the best collection of improved European hazel nuts. The native hazels should be improved, because they resist disease and like the climate. You will not say 'Let Burbank do it.'

PLANNED RIGHT, PLANTED RIGHT

"Your parks have the long open meadows, restful to the eye, mind and body. They are planted right to be cheerful now and two hundred years hence. Use bronze tablets for the vistas and permanent trees. Educate the people to let the park officials "plant thick, this quick." Rochester will teach other cities, as New York, how to care for parks. New York has canyon-like streets that dry the air as a steam radiator, but it can be partly overcome by the watering in feeding I saw at Ontario Beach Park where the young elms are growing four feet per year.

TEACHING NURSERY TRAINING

"Ralph T. Olcott, editor of the American Nurseryman, Rochester, is on the committee of the American Nurserymen's Association on this subject. He can report the opportunities in Rochester. The committee suggests that students be given vacation in the spring to work in Nurseries and parks. The training in your parks is very valuable. The Hicks Nurseries has two men trained here, Edwin H. and Pierre Costich. The University of Rochester can teach the scientific and the parks the practical.

PLANTS OF MONROE COUNTY

"Your botanical section in listing the plants of the county is laying the foundation for the knowledge of the best use of the region. Ecology is the science of the relation of plants and animals to their environment.

FITTING PLANTS TO SOIL

"Your study will be the basis of agriculture and forestry. Where you find the lime loving plants will be planted alfalfa, apple, ash and elm. Where the lime hating or acid soil plants grow will be planted blueberry, peach, plum, strawberry, potatoes, pine and oak.

"Dr. Edgar T. Wherry, of the U. S. Dept. of Agriculture, may lecture here. He has recently discovered a series of chemicals to test the varying degrees of acidity and alkalinity of soils and the preference of each variety of plant. You will then do what the Chinese do, fit plants to soil; not try to change the soil by adding lime, potash, etc.

"The moisture supply of the soil is accurately shown by plants. The full elliptical curve of your elm is a record of no droughts, and shows what fruits or nuts to plant. The presence of drought resisting species on the sand in Durand-Eastman Park shows where it is too dry for apples.

"The foreign trees you are testing will show in twenty years what soil moisture

they need if you are sympathetic to see the growth.

FITTING PLANTS TO CLIMATE

"Your park is testing plants from all over the north temperate zone and may get some from Patagonia.

"The lake climate lets you grow the European apple, pear, cherry and plum better than anywhere else except on the Pacific coast. However, a winter like 1919-20 killed 60 year old apples and you will breed hardier varieties from apples native here and in Siberia.

"Western New York has developed the native grape, blackberry, raspberry, currant and gooseberry, because the European species did not fit.

"The food plants developed in the equable climate of Western Europe are not the best for our variable climate. Those developed in the alkaline region around the Mediterranean are not best for acid soils of the Atlantic slope.

BEAUTIFUL HOME GROUNDS

"I rode around Rochester looking for slums and could not find any. Friends said, "The man who takes care of our garden lives on this street. I cannot tell the difference between this and the streets where people of larger means live.

"Your parks teach beautiful home landscapes and fruitful gardens. In my lectures I use Nathan R. Graves photographs of Rochester homes and factories, such as Morgan Machine Works.

"I am taking for our next catalogue Charles Zoller's auto chrome or color photographs of your lilac, azalea, rhododendrons and crab-apple. You will have azaleas in sweep of color in Durand-Eastman Park because the soil has but little lime. You will arrange the colors harmoniously as illustrated in 'Rhododendrons and Azaleas', by Millais."

Walnut Timber In Demand

The walnut shade trees in LaGrange county are being rapidly picked up by buyers for furniture factories. Kretzinger & Davis, of Southern Indiana, have been buying many trees and paying as high as eighty-five dollars for those two feet in diameter. Marion Garnire sold one about thirty inches in diameter the other day for \$150.

This is the natural home of the walnut and a little activity in the way of planting along roads or in places not very favorable for other use would add immensely to the wealth of the county within a generation.

A thriving walnut forest would be no small inheritance for one's children, and it is very easy to start and care for. It would beat life insurance.—LaGrange, Ind., Standard.

On the Kansas City, Mo., market this month jobbing prices were: Black walnuts 4c lb.; large hickory nuts 6½ to 7c.

If it relates to nut culture it should be in the AMERICAN NUT JOURNAL. Please send it in.

GET PECAN LAND

Where Pecans Were Born

Large and small tracts of the finest pecan land in the world can be bought cheap **right now**.

A new project to irrigate the San Saba valley will send land prices to four and five times the present figure.

Pecan orchards planted and developed by experts for non-residents. Unplanted land can be bought **now** at \$35 and upward per acre. All titles perfected.

A. W. WOODRUFF

Secretary, San Saba Pecan Co.
SAN SABA, TEXAS

List Your Wants And Offerings In

THE OFFICIAL JOURNAL

Every Month To Every State In The Union

AMERICAN NUT JOURNAL
ROCHESTER, NEW YORK

The American Nut Trade: Market and Crop Reports

PERSIAN WALNUT

Manchurian Walnut Standards

The Foreign Commerce Association of the Pacific Coast, with headquarters at San Francisco, has circularized the nut trade explaining the size of standard and tolerance which have been adopted to cover Manchurian walnuts for 1922 crop deliveries when sold under the uniform contract of the association. The restrictions read: "When size of walnuts in shell is specified in contract, such as 1-inch, 1½-inch, etc., it shall be understood to refer to nuts which are held up on a screen having uniform square holes of the size specified. If samples are tested over hand screens a tolerance of 7½ per cent by count, based upon the entire tender, shall be applied to the results of such hand or laboratory grading tests to compensate for differences between methods of laboratory and commercial grading, which tolerance shall apply to contract specifications for all sizes; provided, that not more than 1 per cent of total delivery shall pass through a screen ⅛-inch smaller than the size specified in the contract. All hand screens shall be uniform square mesh. No tender shall be subject to rejection on account of size unless it shall contain a total of undersized nuts in excess of 15 per cent of the entire tender as determined by hand screen test. Buyer shall be entitled to an allowance for all such undersized nuts in excess of 7½ per cent, which allowance shall be determined by arbitration."

Capt. M. S. Murray, Quartermaster of the Soldiers' Home, Sawtelle, Cal., states that the crop of the Home's newly acquired walnut orchard has surpassed all expectations. There are about 500 walnut trees from which there were gathered approximately 20,000 pounds.

Bringing slightly over \$700,000, the first pool of Goleta, California walnuts was disposed of at the opening price and growers of the district are more than satisfied with the way the business was handled.

THE ALMOND

The crop report on California almonds shows that production is estimated at 76 per cent of a normal, as compared with 64 last year and a ten-year average of 74. The crop did not turn out quite as well as condition figures during the growing season would indicate. The total of the entire state will this year approximate 27,000 tons.

The promptness with which the 1922 California almond crop was marketed is indicated by the announcement by manager Tucker that on Nov. 15th 95 per cent of the total tonnage had been sold and shipped; 14 of fifteen warehouses were entirely empty and no further stocks were to be received from the growers.

The Arbuckle, Cal., district shipped under Association plan 400 tons of almonds this year. Independent concerns shipped 200 tons.

Just mention AMERICAN NUT JOURNAL.

Explanation as to Inter-Crop

Editor American Nut Journal:

It seems to me that there is room for the public to misunderstand the meaning of the answers of some of the members of the National Pecan Growers Association in the "Line up of the National Pecan Growers Association Members, at Thomasville, Ga., under the heading "What Horticultural Inter-crop," as published in the November issue of the Journal.

Now, I answered none, thinking it meant did we plant peaches, figs, oranges, etc. And I see that many answered "farm crops, beans, peas, etc."

We plant velvet beans, peas, clover, and in fact all kinds of farm crops, rotating same for the benefit of the soil and trees.

If you think it important enough to explain this matter in the Journal, it might help some one who might not understand why some plant farm crops while others do not seem to do so.

Toledo, Tex.

R. L. ODOM.

Durability of Blight Infected Chestnut

Blight-infected chestnut is as durable as sound chestnut according to service records collected by the U. S. Forest Service on chestnut posts, poles and ties. Inspections on posts in one locality during eight years of service showed that decay progresses about as rapidly in undiseased posts as in blight infected posts. The blight fungus attacks living trees and grows in the bark, particularly in the cambium layer, but it does not penetrate deeply into the wood itself. The blight finally kills the tree, effectively girdling it by separating the bark from the wood. Blight-killed chestnut should be cut and utilized as soon as possible.

There has been a very serious shortage of rainfall in the coconut-growing districts of Ceylon for the past two months, says Consul Marshall M. Vance, Colombo, in a report to the Department of Commerce. It is predicted that due to the drought there will be a 15 to 20 per cent decrease in out-turn of coconuts during the balance of 1922 and the first six months of 1923. Nuts are now dropping before they are fully matured.

Rain Damaged Almonds

October rains damaged California almonds to considerable extent. Damaged nuts were shelled before marketing was attempted. Manager T. C. Tucker said: "The California Almond Growers' Exchange will put on special inspection crews so that the usual standard of the Blue Diamond quality will be maintained. All rain stained nuts received by us will be shelled. This will reduce the supply of nuts in the shell. Every bag of Blue Diamond almonds is guaranteed as to quality. We will not mix or blend off grades. We have spent hundreds of thousands of dollars and we will take every precaution to maintain the reputation of our product."

The Oakdale branch of the California Almond Growers Exchange this year shipped 430 tons of almonds. The Oakdale growers have just completed a \$45,000 storage building.

Orange county, Cal., produced 7000 tons of walnuts this season.

THE PECAN

Pecan Trees for Alabama

Answering the questions as to the best soil, Professor C. L. Isbell states that pecans follow the Cotton Belt. In most cases good land for growing cotton is good land for pecans. Low land which is not good for cotton is likewise not good for pecans.

For general purposes the best varieties for Alabama are Stuart, Success, and Schley, with Pabst and Alley and other varieties coming in the second group. For special purposes other varieties may be more desirable.

Pecan trees may be had from most Alabama Nurserymen, lists of which are being sent by the Horticultural Department to those who request same. County agents are also in position to advise farmers as to where to buy pecan trees and furnish them information as to their setting and care.

Alabamians Discuss Pecans

At the 18th annual meeting of the Alabama Horticultural Society at Selma, Nov. 17th, the pecan occupied much attention.

A discussion of pecan varieties and identification was conducted by Prof. C. I. Isbell, of Auburn and to make the discussion more effective, J. A. Kernodle, well-known pecan grower of Camp Hill, had on display an exhibit containing nuts of many varieties.

Pecan diseases were discussed by Dr. L. E. Miles, plant pathologist of the Alabama Experiment Station. Dr. W. E. Hinds and Dr. F. L. Thomas, of Auburn, told of the more important pecan insects and explained best methods of control.

The production of pecans from the standpoint of the practical grower was discussed by J. E. Dunaway, of Orrville, Houston G. Armstrong, Julian Smith and Clifton Kirkpatrick, each owning fine pecan groves in the Selma district.

Pecan Trees Cheap

County Agent S. M. Day informs The Outlook that he is in position to secure pecan trees at 55 cents each in lots of 100 or more. Those who want trees and do not care to purchase as many as 100 can make up an order with some one else and get them at the 100 rate, which is decidedly cheaper than each person buying them on their own resources.—Alexander, Ala., Outlook.

Officers of the Central Alabama Pecan Growers Association are: C. Kirkpatrick, Selma; G. R. Beers, Benton, vice-president; Morgan Richards, secretary-treasurer. Board of directors: C. Kirkpatrick, G. R. Beers, H. C. Armstrong, J. G. Wilkins, J. E. Dunaway of Orrville, J. A. Minter, Tyler, and Julien Smith, Selma.

"Rushing" Pecan Groves

Some of the largest pecan groves in Tulsa county, Okla., are along the highway between Tulsa and Collinsville, especially in the vicinity of Owasso. On Sundays in the fall motorists in numbers have attempted to rush these groves and take the nuts. The grove owners have been obliged to use strenuous means to protect the nuts.

If it relates to nut culture it should be in the AMERICAN NUT JOURNAL. Please send it in.

The 1922 Pecan Crop

Pecan production of 1922 is reported to be 15.3 per cent of a full crop, compared with 52.2 per cent of a full crop last year. The average crop of the past six years has been just one-half of a full crop, so that the 1922 crop, although only 15.3 per cent of a full crop, is about 30 per cent of the average production, says the Department of Agriculture.

Pecan production tends to fluctuate from year to year, as is the case with many other tree crops, and the favorable crop in many sections in 1921 is frequently mentioned as a reason for the small crop this year. Similarly the crop of 1920 was very small, while that of 1919 was very large. It is believed that a heavy crop exhausts the tree so that it can not bear a heavy crop for several following years. But there were many other causes for the short crop in 1922, including late freezes, early excessive moisture followed by drought later, and unusual insect damage.

The production is lowest in the states of normally heaviest production. In the native seedling belt, Texas, by far the largest producer, reports only 6 per cent of a full crop, while Oklahoma, the next largest, shows 9 per cent, Louisiana, 11 per cent, Arkansas 12 per cent, and Georgia, which leads in production of the improved nuts from planted trees, report only 22 per cent.

Because of very poor production in the states that produce wild nuts, 30 per cent of the crop is of the improved varieties, while the proportion of improved nuts last year was only about 20 per cent of the crop of that year, and in an average year still less.

Prices up to Thanksgiving had not risen so sharply as the short production this year would appear to justify. Last year, on the contrary, the price to consumers held up so high in the face of the fair crop that consumption was lessened and it became necessary to place some of the nuts in storage and carry them over to the present season. Prices to growers for improved nuts are reported to range from 35 to 50 cents, mostly around 43 cents. Prices for the seedling nuts are reported at 15 to 25 cents, mostly around 19 cents. Last year the price to producers for improved nuts was about 34 cents and for seedlings about 14 cents, but

the retail price to consumers was two to three times this figure.

To Develop 120,000 Acres

James O. Craig, President of the Chicago Business Men's Clearing House Association, former President of the Chicago Rotary Club and Illinois Governor of Rotary in 1919, reached Tampa recently on his way to St. Petersburg, Fla.

Mr. Craig spent a week or more in the vicinity of Green Cove Springs, Clay county, where he and his associates arranged to become associated with the R. L. Dowling Company of that county in the developing a tract of 120,000 acres of land declared to be most admirably adapted to the growing of figs and pecans. Wm. E. Kier, also of Chicago, and a past president of the Rotary Club of the Windy City, and Herbert White, are also associated in the enterprise.

Dump Carload of Pecans Into River

A solid carload of pecans shipped from Mexico to the United States was dumped into the Rio Grande at Laredo, Texas, after it was condemned by the bureau of chemistry of the Department of Agriculture, as infected.

Mexicans from Nuevo Laredo, Mexico, followed the 269 sacks of pecans into the river to rescue the nuts, and it was estimated that at one time there were 500 persons in the stream, "gathering pecans."

Mutes To Grow Pecans

Waco, Tex., Dec. 6—One hundred mutes, representing many cities in Texas, at a meeting here recently, decided to buy 100 acres of land, much of which is liberally planted with pecan trees and located two and a half miles east of Denton, on the Denton-McKinney Highway. It will be utilized for a pecan orchard and pleasure resort the name of which will be the Texas Silent Country Club.

Just mention **AMERICAN NUT JOURNAL**.

MEMBERSHIP DRIVE

National Pecan Growers Association
The National Pecan Growers Association fee for membership is \$2.00 per year, with a student membership fee of \$1.00.

The subscription price for the American Nut Journal, official organ, is \$2.00 per year.

Note combination offer below.

REGULAR YEARLY RATES
Association Membership.....\$2.00
American Nut Journal..... 2.00

SPECIAL YEARLY RATES
Association Membership } \$3.25
American Nut Journal }

Address J. Lloyd Abbot, Sec'y.
Route 1, Spring Hill, Ala.

Planting Pecan Groves In California

Calexico, Cal., Dec. 1—A. M. Shank has arranged for planting the first pecan grove in this district. He expects to set out 40 acres in trees of a variety recommended for this climate. Investigation by pecan experts has led them to believe this variety of tree will reach its maximum production in Imperial Valley.

W. J. Hartman has prepared to plant two acres of pecans at his ranch near here, and other land-owners are expected to follow the example of Shank and Hartman in this experiment. Reports of pecan groves planted in the Yuma valley, where the climate, water and soil are similar to those of Imperial Valley, indicate remarkable success.

Pecan Trees In Oklahoma

By the 1920 census there were 400,486 pecan trees in Oklahoma, from which a full crop would be 4,725,666 pounds, it was estimated. In 1919 the crop was 4,296,642 pounds, or 91 per cent of a full crop. In 1920 the crop was only 47 per cent and in 1921 it was 15 per cent. In 1922 about 20 per cent.

Pecan Trees Yield \$50 Each

Munson, Fla., Dec. 4—Fifty dollars a tree for his pecan yield this season is reported by C. B. Faulk of this place. One hundred pounds to the tree at 50 cents a pound is the record. This is the best yield and the best price reported in Santa Rosa county this season.

7500 Pounds of Pecans on 7 Acres

On a seven-acre tract of Harry U. Jackson's pecan groves, Baconton, Ga., there are three rows of Mobile trees, forty trees to the row, or 120 trees in all, which have made 7,500 pounds of nuts this season, worth 35 to 50 cents a pound.

The Texas Pecan Growers Association adopted, on Nov. 28th, strong resolutions against the removal of the pecan insect investigation station from Brownwood, Tex. A. W. Woodruff, president of the San Saba County Pecan Growers' Association, was chairman of the resolutions committee, and H. G. Lucas, president of the Texas Pecan Growers' Association, presided at the meeting.

Finest Paper Shell PECAN TREES Grown

Wright's Mammoth Stuarts. Success. Schleys, grafted above ground. Strong, vigorous stocks with heavy, well-developed roots. Well spread tops. Will bear in 3 to 4 years. Trees 7-8 to 8-9 feet \$1.25, lots of 100 to 1000.

THE CALIFORNIA RANCH,
Helena, Miss.

FOR SALE—"PECAN VILLA"

Highly improved. 800 tree orchard. A gentleman's estate and revenue producer.

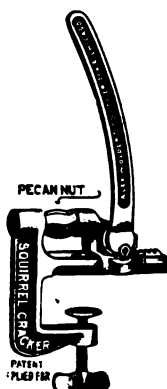
H. M. BANNING, Owner
CITRONELLE, MOBILE CO., ALA.

Squirrel Nut Cracker

BEST ON EARTH

Cracks the Shell but not the Kernel.
Adapted only for table nuts—especially Pecans.

ALEX WOLDERT CO.
SOLE DISTRIBUTORS
TYLER, TEXAS and CHICAGO, ILL.



PECAN NUT

SQUIRREL CRACKER

PATENT PLEASER

The Logical Market Place for Sale of Nuts

The Advertising Columns of the American Nut Journal Chief Exponent of the Trade.

Hundreds of Readers of this Journal Ask for Pecan Nuts in Moderate Quantity at Prices Less Than the Retail Price per Pound in Northern Markets. They Would Be Eager Buyers if They Knew Where to Apply. If There is Any Surplus at Any Time, the Advertising Columns of this

Journal Will Dispose of It. Rate, \$2.80 per Inch. Announcement Should be Maintained the Year Around (Yearly Rate, less than 60 Cents per Inch a Week) to Secure Best Results. Make Your Name a Household Word Wherever Pecans Are Wanted. Make It Easy To Procure Them.

AMERICAN NUT JOURNAL

P. O. Box 124

ROCHESTER, N. Y.

THE HICKORY

Hickory Disappearing; Who's Planting?

Need for new hickory trees is shown in an article in the New York Sun which says: "The old-fashioned shellbark hickory nut has virtually disappeared from the market. Inquiry in five Manhattan stores which deal exclusively in nuts failed to produce a single one."

"Until a few years ago the shellbark nut was staple and was considered one of the most toothsome of all varieties. Then automobile manufacturers created an enormous demand for hickory wood used in wheels and bodies. This rapidly diminished the supply of nuts."

Squirrels Pick 'Em for Him

Ellenville, N. Y., Dec. 5—Superintendent of Schools E. C. Hocmer of this village has found a novel way of collecting the hickory nuts which abound on trees near his camp at Ulster Lake. He has taught a six-months-old Airedale puppy to start a loud uproar each time the red squirrels get in the nut trees. The squirrels retaliate by sending down a shower of nuts at the dog. When the supply is sufficient Hocmer calls off the dog and collects the nuts.

Capturing Hoosier Hickory

The editor of the Rochester, Ind., Sentinel gives this account of a nut growing incident:

"Joel Swygert, pioneer of this county who lives south of Akron, came to Rochester Saturday to spread propaganda for the correct raising of hickory and walnut trees in the country. Mr. Swygert has made a life-long study of the nut trees and brought as the proof of his results a peck of shellbark hickory nuts which came from a tree he had transplanted himself."

"He stated that eighteen years ago he went into the woods and finding a young hickory nut tree he dug down about a foot and cut off the big central root, letting the tree stand. He says that in such a tree there is only one large root and that it grows as far in the earth as the tree goes in-

to the air. The tree was allowed to stand for two years more and as a result of losing its main root many smaller ones quickly branched out in all directions just as they do on a fruit tree. Then he transplanted the tree near his home and it grew rapidly, seeming to be more healthy than ever with its new roots."

"Walnut trees may be made to grow more nuts by planting the walnut on top of a good sized board about ten inches below the surface of the ground. This forces the roots to grow outward and in a year or two the trees will have its roots spread just like that of a fruit tree."

"Mr. Swygert declares that this generation can plant trees and enjoy them for themselves and if the people of this community would plant all varieties of trees in their yards public parks, along the roads and streets within twenty years the place would be a regular woods once more—an act which coming generations would always appreciate."

The Public Craves Them

Waukegan, Ill., Dec. 7—Reports from all parts of Lake county indicate that the yield of hickory nuts and walnuts this year broke all records. The trees, especially the hickory nut trees were fairly groaning under their heavy loads. Automobilists driving along the country roads have been surprised at the great profusion of nuts. They said that the ground under the trees was covered. A club thrown into a tree brought down hundreds of the nuts which were of a superior quality. There have been literally hundreds of nutting parties in this vicinity.

Nut Market Flooded

Pomeroy, O., Dec. 7—The Pittsburg market and other markets are being flooded with shipments of hickory nuts and walnuts from this section of the world. One dealer is reported to have shipped five carloads of nuts and others almost as many. Some of the buyers are storing thousands of bushels away expecting a short crop next year.

Just mention AMERICAN NUT JOURNAL.

HIGHLY VALUABLE INVENTION

What Mrs. Fannie S. Spitz, Albuquerque, N. M., has done for the nut industry is becoming more and more appreciated as knowledge of her nut-shelling and separating machine, designed especially for the New Mexico pinon nut, will do. A new model of the machine is attracting much attention. This was exhibited at the National Confectioners' Industries Exposition, at the Coliseum in Chicago. A white-enameled pail full of clean pinon kernels, at the base of the machine, is mute evidence of the solving of a difficult problem—how to get at those kernels when incased in a hard shell not much larger than a pea.

It would seem that full recognition and honor have not yet been accorded one who has done so much for the nut industry by this valuable invention.

Three Bushels From a Seedling

Hondo, Tex., Dec. 10—Henry Howard showed a sample of the pecans taken from his old place at Black Creek, now owned by Wm. Rackley, from a tree which Mr. Howard said he planted 21 years ago this winter from seed almost identical with the sample shown, a fine large variety. The tree had about three bushels on it this year, Mr. Howard said.

Rupert L. Rackley, Statesboro, Ga., did an extensive business this fall shipping pecans by parcel post in five and ten pound packages all over the country. He made one shipment to China.

In early days the trees of hickory, chestnut, butternut and black walnut were numerous in the timber tracts. On windy days in autumn I have seen the ground thickly covered and white with hickory nuts that had blown off the previous night. These nuts were of superior quality and of large size. If I had such a tree as this upon my farm at the present day I would not sell it for a thousand dollars.—Charles A. Green, Rochester, N. Y.

If it relates to nut culture it should be in the AMERICAN NUT JOURNAL. Please send it in.

Budded and Grafted
HARDY NORTHERN NUT TREES
Best varieties, grown in natural nut soil. Send for catalog. Have your seedling nut trees topworked to these fine varieties.
Information and estimate on request.
INDIANA NUT NURSERY
Rockport. J. F. Wilkinson, Prop. Indiana

PECAN TREES

100,000 TREES—STANDARD VARIETIES
WE GROW NOTHING BUT PECAN TREES
HIGH QUALITY—SERVICE THE BEST
SIMPSON NURSERY CO., MONTICELLO, FLA

THIS SPACE
\$2.50 Per Month Under yearly Contract
Under less than yearly term:
\$2.80 Per Month

PECANS

We are the pioneer growers of budded and grafted pecans in the South. Have a complete stock of the leading standard varieties. Can furnish trees we know will please and give satisfactory results. Catalog free.
INTERSTATE NURSERIES
C. M. Griffing & Co. Props., Jacksonville, Fla.



NEW EDITION FREE

A practical guide showing how to bud pecans. Tells how to grow trees 12 inches in diameter by the end of the 8th year, which yielded 400 lbs. nuts per acre.

Trees, Nuts, Groves for sale direct without agent at attractive reduced prices
B. W. STONE, Thomasville, Ga

WANTED—PROPAGATOR

Have employment for expert propagator to graft several thousand pecans on one and two year old stocks. References required and furnished. Results must be guaranteed.

J. H. BURKETT, Clyde, Texas

SUCCESS

and other leading varieties. Also citrus
BECHTEL PECAN NURSERIES
Ocean Springs, Miss.

PECAN TREES

Plant them this year! Buy direct from nursery and save agent's profit. All standard varieties; quality and service the best. Write us for prices.

FLORIDA NURSERIES
W. W. Bassett, Prop., Monticello, Fla.

AMERICAN NUT JOURNAL CHIEF EXPONENT OF AMERICAN NUT INDUSTRY

Of National Circulation

Covering Every Phase of Nut Culture

Subscription: - - \$2.00 Per Year
Advertising: - - \$2.80 Per Inch

Official Journal { National Pecan Growers Association
Northern Nut Growers Association

AMERICAN FRUITS PUBLISHING COMPANY

39 State Street, Rochester, N. Y.

An Interesting Comparison

C. W. Bricker, Ladora, Iowa, writes to A. C. Pomeroy, Lockport, N. Y., citing the interesting process frequently used in comparing the weight of a Pomeroy English walnut kernel with a California English walnut kernel. Mr. Bricker says, under date of Nov. 29, 1922:

Nuts and trees at hand. Weighed

6 California No. 1.....1 oz. 5 dr.

6 Pomeroy1 oz. 6 dr.

Weighed kernels:

The California.....5 dr. 13 gr.

The Pomeroy.....7 dr. 20 gr.

While the Pomeroy nut is smaller than the California, the weight of the kernel is decidedly more.

Does the Public Want Nuts?

Sterling, Ill., Dec. 1—Albert Field, who owns something like four hundred acres of land near Prophetstown, has about two hundred walnut trees on the farm that are large and healthy and which this season, were loaded with nuts. It is estimated that these trees produced this season at a close estimate more than 8,000 bushels of nuts and nearly all of the product of the trees has been taken away free to those who came after them. Mr. Field and Mr. Sholes not making a cent charge for them. Estimate them at fifty cents a bushel and you will have the actual value at that price, \$4,000.

Planting Walnuts In Pennsylvania

Reading, Pa., Dec. 6—Berks County in years past was noted for its many fine walnut trees. They grew to an immense size in these fertile valleys and there were walnuts to gather by the wagonloads. The demand for walnut timber has caused nearly all walnut trees of suitable size to be cut and the logs sold. A few farmers have taken up the systematic culture of walnut trees along roadsides and about farm buildings that bid fair to become successful. Some of these trees are already bearing nuts, and will, from present indications, give large returns in a few years.

Valuable Shade Trees

Salem, Ore., Dec. 2—Sufficient walnuts to supply every man, woman and child in Salem with two and a half pounds have been grown in the parking spaces and within the city limits, a survey of Salem reveals.

Approximately 48,000 pounds of nuts were grown on the city's shade trees this year. It is estimated that this is more than enough to supply the entire needs of the city for the coming year. The crop is valued at \$12,000.

Local authorities believe that there are enough trees growing in Salem parking spaces to plant an orchard of 60 acres. There are believed to be over 1000 trees within the city limits.

Picking 'Em Up In Missouri

Geo. E. Ward, Fred Hays and Slim Rutherford got in, Sunday afternoon, from their camping trip, on the Osage. Besides having a nice time, the boys got a hundred and ten pounds of pecans. The nuts are pretty well gathered, they say, and most of the trees are on private property, where they are pretty closely looked after. The Osage is a government stream, and for sixty feet on each side of its banks, the land is controlled by Uncle Sam. Any trees that are on this territory are free.—Lamar, Mo. Democrat.

If it relates to Nut Culture it ought to be in "American Nut Journal." Please send it in.

THE NORTHERN NUT GROWERS' ASSOCIATION

THIS Association comprises among its members those most skilled in the propagation of nut trees and those most advanced in nut growing. It also comprises among its members many who are not experts, and who become members for the purpose of learning. It welcomes to membership both the expert and the learner. It is not organized for profit, its aim being the acquisition and dissemination of knowledge of nut trees and nut growing. A number of its members have expended much time and considerable money in experimental work, and have given the results to the Association. This work is still going on.

The proper use of nuts is not generally understood. They are usually used as a delicacy, whereas they are a most concentrated food. Careful experiments have shown that they will successfully replace meat in the diet even of such animals as wolves and tigers. The food value of nuts from an acre of ground is many times that of the beef that can be produced on the same ground, and nut growing seems destined to solve the problem of the diminishing supply of meat and the increasing demand for it. Probably the most practical use of nuts is to partially replace meat rather than to replace it altogether.

In Europe, land with bearing nut trees on it brings a higher rental than the best cultivated land, and the same will be true in America when the value of nut tree crops is more generally recognized. In certain sections of the South, pecan trees bearing fine nuts have enormously enhanced the value of the land on which they stand, and it is only a question of a few years when this will be true in other sections of the country. It will be so when the orchards of nut trees, now being planted, begin to bear. It is confidently believed by the Association that nothing can be grown which will give as great returns, for the labor expended on them, as bearing nut trees.

Nut trees will not come true from seed any more than fruit trees will. A fine nut, when planted, will almost certainly cause a tree to grow which will bear very inferior nuts, but this same tree will bear fine nuts if it is grafted or budded with scions or buds from a tree bearing fine nuts. While fruit trees have been successfully grafted and budded for many years, it is only within a few years that it was possible to do this with nut trees. This can now be done quite successfully, however, and the methods of doing it are being steadily improved. Young trees, grafted or budded to the fine varieties of nuts that have been discovered can now be procured from a few nurserymen making a specialty of growing them. The Association has a list of such nurserymen which will be mailed free on request.

While fine varieties of northern pecans, hickories, black walnuts, etc., have been discovered and are being propagated, it is doubtless true that all the fine nut trees in the country have not come to the attention of the Association and hence it is seeking each fall to learn of other meritorious nuts, and, to further this, prizes have been offered for northern pecans, hickories, black walnuts, butternuts, hazels, English walnuts and Japan walnuts.

It is perhaps well to state here that nut growing, being the newest branch of agriculture, at least in America, is one about which everything is not known, and the best varieties of each particular kind of nut for each section is something that has not been definitely worked out. It is being done, however, and progress in growing nut bearing trees and shrubs is so rapid that a person whose knowledge is two or three years back is behind the times. This is in marked contrast with other branches of agriculture where good cultural methods and varieties were worked out years ago. In the matter of nut growing almost the only way to get the latest information is by reading the American Nut Journal and through the Secretary's office. There is no place where up-to-date information on nut growing is to be found as it is in the Secretary's office, and his services are free to members.

Even though the facts require it to be stated that our detailed knowledge of nut growing is not as comprehensive as that on most other agricultural subjects, yet it must not be understood that it is not sufficient so that planting nut trees must be regarded as so difficult that few can succeed. Anyone, who plants the right kind of nut trees, in good soil, and gives them proper attention till they become established will have something that will not only be a source of pleasure but a source of constantly increasing income. The English walnut, hazel and almond orchards of Europe and California and the pecan orchards of Southern United States have amply demonstrated this for these sections, and the nut trees planted in the north which are just coming into bearing have convinced careful observers that the fine nut trees in the north will do likewise. Therefore the Association wishes to emphasize that the important thing to do now is to **PLANT THE FINE VARIETIES OF NUT TREES THAT WE NOW HAVE.**

Membership in the Northern Nut Growers' Association is as noted below:
 Membership for one year, including copy of Current Report.....\$2.00
 Membership for one year, including copy of the Current Report and subscription to the American Nut Journal for one year, if sent to an address in the United States 3.25
 Membership for one year, including copy of the Current Report and subscription to the American Nut Journal for one year, if sent to an address in Canada or abroad 3.75
 Contributing Membership and Subscription to Journal, one year..... 5.00
 The Current Report is the 12th. Copies of the 2d, 3d, 4th, 5th, 6th, 7th and 8th can be supplied at 50c each to members, or \$1.00 each to non-members.

The American Nut Journal is the only paper devoted exclusively to nuts and nut growing. Subscription to it, without membership in the Association, is \$2.00 per year or \$2.50 if sent to Canada or abroad.

WILLARD G. BIXBY, Treasurer, 32 Grand Ave., Baldwin, Nassau Co., N. Y.

Ginkgo Nut Poisoning

I can add one more to the known causes of dermatitis venenata, more widely understood if I call it inflammation of the skin due to an external poison, such as that produced by poison ivy. Following the washing off in a basin of water of the vile smelling pulp of a lot of ginkgo nuts I have developed a pronounced redness, swelling and itching of the skin of the back of the hands and of the wrist and slight redness, itchiness and burning of the face and elsewhere. The irritation of the hands was noticeable while the nuts were being washed and was con-

tinuous. The powerful odor and the irritation caused are probably due to the presence of a volatile oil. This recalls the much more serious experience of Mr. C. A. Reed with the Cashew nut, or Anacardium occidentale, which grows on a tree closely related to our native poison sumachs.

DR. W. C. DEMING.

Shell bark hickory ranks first in fuel value, with chestnut, white oak, white ash and red ash following in the order named.

Bates county, Mo., reported a 100 per cent crop of native pecans this year.

American Fruits Company's Library Opportunities

PRACTICAL BOOKS ON HORTICULTURE, NUT GROWING, NURSERY PRACTICE

Any of the following books will be sent on receipt of price by AMERICAN FRUITS PUB'G CO.,
123-125 Ellwanger & Barry Bldg., ROCHESTER, N. Y. Prices subject to change.

American Apple Orchard By F. A. Waugh.....\$1.90	Insect Book—Dr. L. O. Howard..... 6.30	Parsons on the Rose—Parsons..... 1.75
American Fruit Culturist By John J. Thomas..... 3.65	Insects and Insecticides—Weed..... 2.15	Peach Culture—J. A. Fulton..... 1.65
American Fruit Farm—F. N. Thorpe 2.65	Insect Pests of Farm, Orchard and Garden—Sanderson and Peairs.. 4.65	Peach Growing—By H. P. Gould.... 2.65
American Grape Culture—Munson.. 2.65	Irrigation Farming—L. M. Wilcox... 2.40	Pear Culture for Profit—Quinn..... 1.35
American Grape Growing and Wine Making—George Husmann 2.15	Irrigation for the Orchard—Stewart 1.75	Picturesque Gardens—Henderson... 2.25
American Horticultural Manual By Budd-Hansen, two vols..... 3.15	Land Drainage—Joseph H. Jeffrey.. 2.15	Plant Breeding—By Dr. L. H. Bailey 3.40
American Peach Orchard—Waugh.. 1.90	Landscape Gardening—Art of Land- scape Architecture—Parsons.... 3.65	Plant Propagation; Greenhouse and Nursery Practice—M. G. Kains... 2.40
Bulbs and Tuberous-Rooted Plants.. 2.15	Landscape Gardening—Downing's Famous Work—10th Edition— Revised by Waugh..... 6.00	Plant Physiology—B. M. Duggar.... 3.00
Bush Fruits—By F. W. Card..... 3.15	Landscape Gardening—House and Garden's Book of Gardens, 9 1/2 x 12 1/2, 400 Illustrations..... 5.15	Pomology, Text-book of—Gourley... 2.75
California Fruits and How to Grow Them—E. J. Wickson, A. M.... 4.15	Landscape Gardening Kemp—Re- vised by F. A. Waugh..... 2.15	Practical Forestry—A. S. Fuller.... 2.15
Citrus Fruits—J. E. Coit..... 3.40	Landscape Gardening—Maynard 2.65	Practical Fruit Grower—Maynard... 1.00
Commercial Apple Industry of North America 3.65	Landscape Gardening—The Small Place—By Elsa Rehmann..... 3.65	Principles of Agriculture—Bailey... 2.00
Cyclopedia of Hardy Fruits By U. P. Hedrick 6.20	Landscape Planting, Plants for.... .85	Productive Orchard—F. C. Sears. 2.65
Dwarf Fruit Trees—Waugh..... 1.00	Landscape Gardening—Cridland.... 2.65	Principles of Fruit Growing—Bailey 2.65
Farm Bureau Movement—O. M. Kille 2.15	Landscape Gardening—The Com- plete Garden—Albert D. Taylor. 6.15	Principles of Pruning—Kains..... 2.65
Fertilizers and Crops By Dr. L. L. Van Slyke..... 3.40	Landscape Gardening—O. C. Simonds 6.15	Pruning Manual—By L. H. Bailey... 2.65
Fertilizers—Edward B. Voorhees... 2.65	Manual American Grape Growing— Hedrick 3.40	Putnam's Garden Hand Book..... 2.00
Field Notes on Apple Culture By Dr. L. H. Bailey..... .90	Making Horticulture Pay—Kains... 1.90	Quince Culture—W. W. Meech..... 1.35
First Principles of Soil Fertility By Alfred Vivian..... 1.50	Manual of Fruit Diseases—L. R. Hessler, H. H. Whetzel..... 3.15	Roses—How to Grow—Robert Pyle. 1.35
Forcing Book—By Dr. L. H. Bailey. 2.15	Manual of Fruit Insects—M. V. Slingerland, C. R. Crosby..... 3.90	Rose—H. B. Ellwanger..... 1.40
Fruit Growing in Arid Regions..... 2.75	Manual of Gardening—L. H. Bailey.. 3.40	Sales Promotion By Mail..... 2.15
Fruit Garden—P. Barry..... 2.40	Manual of Tree Diseases—Rankin... 3.40	Small Fruit Culturist—A. S. Fuller.. 1.75
Fruit Harvesting, Marketing—Waugh 1.90	Manual of Vegetable Garden Insects By Crosby & Leonard..... 2.90	Soils—E. W. Hilgard..... 4.25
Fruit Insects—Crosby..... 3.90	Manures and Fertilizers—Wheeler.. 2.65	Soils—Lyon-Fippin-Buckman 3.40
Fumigation Methods 1.90	Modern Fruit Marketing—Brown.... 1.90	Soils—F. H. King..... 2.40
Gardening for Pleasure—Henderson. 2.15	Modern Propagation Tree Fruits— B. S. Brown..... 1.65	Soils—By Charles W. Burkett..... 1.90
Gardening for Profit—Henderson... 2.15	Nature's Garden—Neltje Blanchan.. 6.30	Spraying Crops—C. M. Weed..... 1.00
Grape Growers Guide—Chorlton... 1.65	Nursery Manual—Dr. L. H. Bailey... 2.65	Standard Cyclopedia of Horticulture Edited by L. H. Bailey. In six vol- umes. 3,600 pages. 4,000 text engravings. 96 sepia halftones. 500 collaborators. May be had on installment payments..... 40.00
Grape Culturist—A. S. Fuller..... 2.15	Natural Style Landscaping—Waugh 2.65	Strawberry in North America—S. W. Fletcher 1.90
Greenhouse Construction—Taft..... 2.40	Manual Tropical and Sub-tropical Fruits—Popenoe 3.90	Strawberry Growing—S. W. Fletcher 2.40
Greenhouse Management—Taft..... 2.40	Nut Culturist—Andrew S. Fuller.... 2.15	Success in the Suburbs—John R. Mc- Mahon 2.15
Hedges, Windbreaks, Shelters..... 1.00	Nut Growing: Latest Information; Guide to Propagating—By Rob- ert T. Morris..... 2.65	Successful Fruit Culture—Maynard 1.75
How To Grow Roses—Robert Pyle.. 1.35	Ornamental Gardening—E. A. Long. 2.15	Surgeon's Philosophy—Dr. R. T. Morris 3.15
Injurious Insects—F. L. Washburn.. 2.65	Principles of Floriculture..... 3.40	Systematic Pomology—Waugh..... 1.90
Insects of Economic Importance— Herrick 2.15		Ten Acres Enough—I. P. Roberts... 1.75

A paper which gives the best value for the money to the reader will give the best value to the advertiser as well. I don't think there is any argument about the soundness of this view.—H. Dumont, Chicalo, Ill., in Printer's Ink.

WANTED Names and Addresses of Owners of Groves of Native Nut Trees in Northern States.

In the interest of Northern Nut Culture this Journal desires the above information to serve as a basis for extension of Nut Culture.

Readers will confer a favor by sending us lists of names and addresses of those who have stands of nut trees on their property, (with some account of productivity if practicable). Black walnut, English walnut, butternut, hickory, chestnut, filbert, etc.

American Nut Journal P.O. Box 124 Rochester, N. Y.

BUDDED and GRAFTED Nut Trees

Start right with my hardy Pennsylvania grown trees and be assured of success.

Attractive Catalogue Free.

I have this season a fine lot of stake trained Pecan, English Walnut, Black Walnut and Persimmon trees budded on root pruned transplanted stocks, that will please you and that will transplant easily and rapidly. Write for catalogue.

J. F. JONES, The Nut Specialist
LANCASTER, PA.

THIS SPACE
\$2.50 Per Month Under Yearly Contract
Under less than yearly term:
\$2.80 Per Month

GRAFTED PECAN TREES
ALSO BUDDED ROSES and SATSUMAS
We Solicit Your Inquiries
Carol Plantation Nurseries,
THEODORE, ALA.

Texas Pecan Nursery
Arp, Texas
THE PEOPLE THAT GROW
WELL-ROOTED PECAN TREES

CONSULTING TROPICAL HORTICULTURIST and TREE EXPERT

HARVEY C. STILES

COLUMBIA, TEXAS

Specializing in Pecans, Grapefruit, Avocados, and Landscape Development. Long experienced expert for—and present active director of—many such large projects throughout tropics and semi-tropics. Examinations, Reports, Plans, Specifications and Estimates. Correspondence suggested.

Have You Nuts to Sell?

HICKORY NUTS BLACK WALNUTS
BUTTERNUTS CHESTNUTS

Hundreds of buyers are asking where the nuts can be obtained in quantity. Place your Sale Advertisement in the AMERICAN NUT JOURNAL for quick returns. \$2.80 per inch.

39 State St., Rochester, N. Y.

American Nut Journal

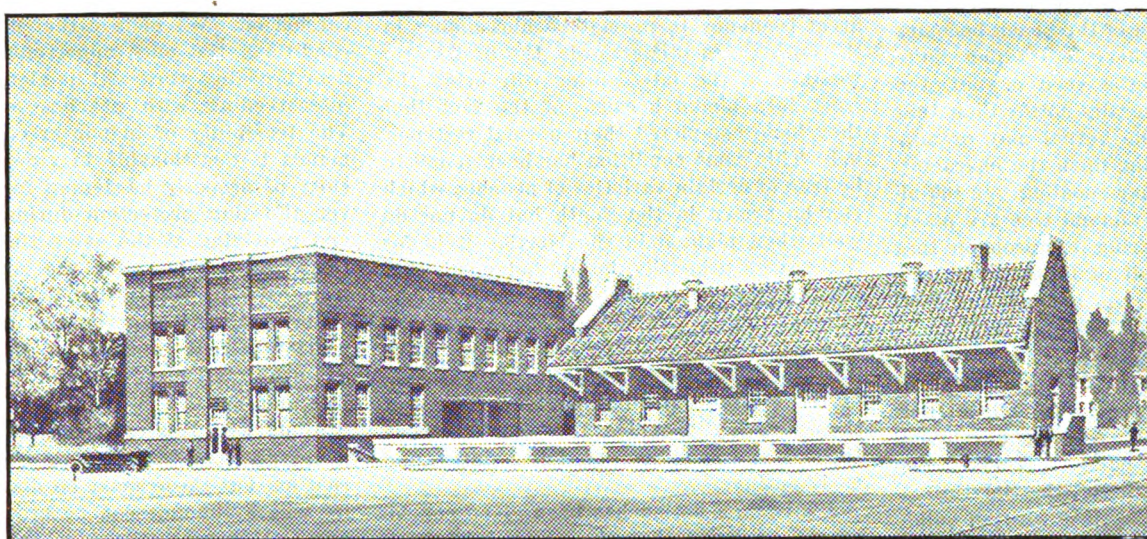
**DEVOTED TO NUT GROWING INTERESTS
GENERALLY THROUGHOUT THE AMERICAS**

Vol. XVIII, No. 1

JANUARY, 1923

Per Copy 20c.

PECAN PACKING HOUSE For Handling Nuts Under the Co-operative Marketing Plan



New Building of the National Pecan Growers Exchange, William P. Bullard,
President, Albany, Georgia—Facilities for Handling Large
Aggregate for Member Growers

39 STATE ST.



ROCHESTER, N. Y.

American Fruits Publishing Co.

ALMOND POSSIBILITIES IN THE EASTERN STATES

By R. H. TAYLOR*

There is probably no better way to open a discussion of this kind than by asking a question and then using it as a test. The future possibilities for almond production in the eastern states cannot be stated any other way than as a question. For my text I am indebted to your Secretary, Dr. W. C. Deming. It is taken from a letter written by him under date of June, 22d to Mr. T. C. Tucker, the manager of the California Almond Growers' Exchange, and is as follows:

"Why can't we breed an almond that will do in the East what its sister, the peach, does?"

Any answer we might give must be, of necessity, more or less empirical in nature.

In order properly to understand that answer, and I shall attempt to give one later, certain fundamental relations and limitations must first be considered; then the possibilities of any given line of procedure may be more clearly understood.

Botanically the almond is very closely related to the peach, both belonging to the genus *Prunus*, subgenus *Amygdalus*. The species of the peach being *persica*, and of the almond, *communis*. In fact the two trees are in many respects so much alike that it is possible to select twigs and leaves from each which cannot be distinguished except by an expert, and even he may be misled at times. Ordinarily, however, they are of sufficient difference to be readily distinguished.

THE PEACH AND THE ALMOND

In the fruit the principle difference is that the fleshy portion of the peach becomes in the almond a leathery hull which splits at maturity revealing a seed or nut, the shell of which is generally softer than that of the peach pit. The kernel may or may not be bitter depending upon the characteristics of that particular seedling. If 100 almonds from a sweet almond tree are planted and brought to bearing it is probable that from a third to a half of them would produce bitter almonds. As a matter of fact, we have had by actual tests as high as 50 per cent bitter. The peach, on the other hand, will, probably in 99½ per cent of the cases, produce a seed with a bitter kernel, only very rarely a seed developing which will produce edible kernels. The same is true of the apricot, the Smyrna variety being an edible apricot with an edible kernel.

The almond is normally the first of the stone fruits to begin growth and come into blossom in the spring and is also normally the last tree to become dormant in the fall. It is evident, therefore, that its normal winter resting period is comparatively short. The peach has a much longer resting period than the almond although less than the apple, pear and other similar fruits, and it is for this reason that peach production is possible in a commercial way in many sections of the East.

In California, where almonds and peaches are very often planted in close proximity, many seedlings are known which are very evidently natural crosses between the peach and the almond. In addition many artificial crosses have been made with no difficulty and have been planted and brought to maturity. The products of those crosses have shown the same general characteristics as those found naturally.

THE PEACH-ALMOND

We are familiar with a peach-almond

growing on the edge of a large almond orchard in California which produces good crops of fruit quite regularly. The fleshy portion or hull is almost edible, being much drier than the flesh of an ordinary peach and yet much more fleshy than the hull of the ordinary almond. It has a slight amount of astringency, a characteristic of the almond hull, but not sufficient to prevent its being eaten. Upon maturity this fleshy portion or pericarp splits but does not open as is usually the case with almond hulls. Inside this the pit, stone, seed or nut, or by whatever name it may be called, exhibits characteristics of both the peach and the almond. It does not have the deep corrugations of the peach pit nor does it have the comparatively smooth shell with small pores of the almond. In this particular variety the kernel is mildly bitter. In almost every respect this cross exhibits characteristics of both the peach and the almond. In other cases this is not true, some approaching more nearly the almond type while others are almost indistinguishable from peaches. In other words, the variations shown are those naturally to be expected in hybrids. THE ALMOND

Now to return to the almond again. We find that for best results in production the almond must be grown in a climate where the winters are comparatively short and yet where there is sufficient cold weather to force the trees into complete dormancy. Where the winters are long or the summers are so dry as to force the trees to become dormant too early in the fall there is a great tendency to premature blossoming in the spring. In other words, the first warm weather in the late winter will bring the trees into bloom because of the fact that they have completed their normal rest period. This same condition has been found to be true of certain varieties of peaches which can be grown in the South but do not do well when planted in the North. It is for this reason primarily, in our judgment, that almonds do not produce under eastern conditions. There are other factors, such as extreme humidity, which may have a bearing, and undoubtedly would in the maturing of these nuts, but this should not prevent them bearing provided they could escape the adverse weather of late winter and early spring.

A mistaken notion has been given considerable credence that the almond is much more tender to frost or cold than the peach. Our experience, where the two have been grown side by side under identical conditions, is that the almond will stand fully as much cold as the peach and in some cases even more. The reason why almond crops are lost oftentimes when peach crops are not is due to their earlier blossoming and consequent subjection to the more severe weather of early spring which the peaches avoid.

IN REGIONS OF LONG WINTERS

It is evident, therefore, that the principal problem in producing almonds in regions of long winters, as compared with those localities where almonds can be produced, is to secure an almond which naturally has a long resisting period, resulting in late blossoming, and yet one which will mature its fruit reasonably early. An almond tree beginning to blossom about the first of February will usually ripen its crop be-

tween the first and middle of August, though sometimes later. Those beginning to blossom about the first of March or later ripen their crops during September usually and often extend into October.

The question of soils and stocks is too broad to discuss here, except to dismiss it with the statement that the soils that will successfully produce peaches should also prove reasonably satisfactory for almonds through the use of peach rootstocks. These are commonly and successfully used in commercial almond orchards in the West.

Whether it will ever be possible to produce commercial almonds will depend upon whether an almond can be bred which will fulfill the requirements of late blossoming and early ripening and at the same time answer the requirements of a commercial nut. We should judge that it is possible, although we believe it is a big problem. Our reason for thinking so is that the Ridenhauer almond under eastern conditions will often produce nuts and it is recognized as doing quite well. We have never had an opportunity of tasting this nut but have seen photographs of the tree and have examined the nuts. Without any knowledge as to the actual ancestry of this nut we are very much inclined to the belief that it is a peach-almond. If this is so it opens up a line of breeding possibilities which should not be overlooked.

PROCEDURE TO BE FOLLOWED

The procedure which should be followed will depend necessarily upon the conditions under which breeding experiments may be carried on. We believe that under eastern conditions the only opportunities for outdoor breeding work will lie along the line of interbreeding with peaches and almonds. The feasibility of indoor breeding with almonds is questionable in view of the difficulty of properly hardening for winter and yet affording protection during blossoming and providing at the same time for conditions which will favor the setting of the fruit. We do believe that there is abundant opportunity for experimentation, with the possibility that valuable results may be secured by systematic breeding along the line just mentioned.

Along with this cross breeding simple almond breeding experiments should be carried on, but these must be done in a locality where almonds can be brought to fruitage. Of course, the ideal place for this would be in California in a known almond district, and it is hoped that as time goes on experiments along this line will be conducted in an effort to secure later blossoming varieties and earlier ripening varieties. Our guess is that it would not be possible, at least within the lifetime of one man, to lengthen the normal resting period of any strain of pure bred almonds to the point where they would be able to withstand the long eastern winters and at the same time shorten the ripening period to practical limits. The development of this work, as far as it can be practically carried, should result in relatively late blossoming almonds which could then be used as a basis for breeding with peaches in an effort to still further approach the desired results and yet maintain the desirable characteristics of the almond. This simply involves the application of known breeding methods to these fruits.

RESULTS IN 10 TO 20 YEARS

To accomplish anything of this kind in-

(Continued on page 15)

* In charge, Field Department, California Almond Growers' Exchange, San Francisco, California.

AMERICAN NUT JOURNAL --- JANUARY, 1923

EDITORIAL DEPARTMENT—Communications on any subject connected with Nut Growing and Distribution are cordially invited by the editor; also articles on this subject. We shall be pleased to reproduce photographs of trees of interest, methods and scenes connected with the Nut Industry; portraits of individuals, etc. Suggestions are cordially welcomed.

ADVERTISING—Advertising forms close on the 10th of each month. If proofs are wanted, copy should be in hand on the 1st.

Advertising rate: 20 cents per agate line; \$2.80 per column inch for any amount of space.

Advertisements that do not represent reliable concerns will not be accepted.

SUBSCRIPTIONS—The "American Nut Journal" will be sent to any address in the United States for \$2.00 a year; to Canada or abroad for \$2.50 a year. Three years: In United States, \$5.00; Canada, \$6.50.

Add ten cents for exchange unless bank draft, express or postal money order is used.

WHAT THIS JOURNAL STANDS FOR—Reliable information on all phases of the Nut Industry. It is for the advancement of Nut Growing in general; it is in no way confined to the interest of a particular kind of nuts, nor of a particular section. It is broad in scope and absolutely independent. The aim of "The American Nut Journal" is to stimulate thousands of persons into developing interest in one of the greatest food supplies of the future—to line the roadsides and fill the waste places with trees of a sort which yield dollars worth of fruit every year instead of the mere bunches of leaves resulting from present shade and ornamental planting. At the same time it will record the progress of the industry, the latest descriptions in the note book of the biologist and plant physiologist, the rapidly expanding knowledge of methods, the increasing acreage, and in short the news as it develops of an industry whose importance is recognized by an increasing number of persons in all sections.

Entered as second-class mail matter June 6, 1914, at the post office at Rochester, N. Y., under the Act of March 3, 1879.

AMERICAN FRUITS PUBLISHING COMPANY INC.

Ralph T. Olcott, Editor and Manager

121-123-125 Ellwanger & Barry Bldg., Rochester, N. Y.

Classified Business Announcements In This Issue.

Rassett, W. W.	Pecan Trees	14	Logical Market Place.....	For Selling Nuts	13
Bechtel's Pecan Nurseries...	Grafted Pecan Trees	14	McGlennon-Vollertsen	Filbert Plants for Sale.....	7
Carol Plantation Nurseries...	Grafted Pecan Trees	16	Northern Nuts	Sources Wanted	16
Eufaula Pecan Co.....	Pecan Groves for Sale.....	5	"Nut Growing"	New Book	10
Florida Nurseries	Pecan Trees	14	Nut Information	Special Topics	3
Gormley's General Store....	New Mexico Pinons.....	13	Nuts as Staple Food.....	Dr. J. H. Kellogg.....	3
Griffing & Company, C. M....	Pecan Trees	14	"Nut Trees for the North".	Expert Advice	3
Harlan Farms Nursery.....	Budded and Grafted Pecans.....	13	Simpson Nursery Co.....	High Grade Pecan Trees.....	14
Indiana Nut Nursery.....	Northern Pecan Trees.....	14	Southern Nut Tree Nurseries	Pecan Trees	14
Inter-State Nurseries	Pioneer Pecan Growers	14	Stiles, Harvey C.....	Tree Expert	16
Investment Opportunity	In Nut Growing.....	12	Stone, B. W.	Pecan Trees, Nuts, Groves.....	14
Jones, J. F.	Grafted Pecan Trees	16	Texas Pecan Nursery	Budded Pecan Trees.....	16
Keso Nurseries	Buddy Nut Trees.....	5	Tucker, Arthur R.....	Pecans for Home and Office.....	12
Lancaster Nut Nurseries....	Northern Nut Trees	16	Wanted	Names of Grove Owners.....	16
Locke, Cliff A.....	Pecan Groves for Sale	5	Wilkinson, J. F.	Crafted Pecan Trees	14

IMPORTS OF NUTS INTO THE UNITED STATES, FOR CONSUMPTION, DURING THE LAST THIRTEEN YEARS

(Compiled by Bureau of Commerce and Navigation, Department of Commerce, Especially for the "American Nut Journal.")

KIND	1909	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919	1920	1921
Almonds—not shelled.....lbs	2,120,632	6,810,056	3,762,854	5,242,563	2,363,860	5,501,059	4,684,598	2,368,369	4,901,168	6,149,374	7,482,538	6,460,732	5,068,215
Shelled.....lbs	8,538,064	10,495,750	12,180,635	11,692,988	12,655,067	13,896,621	12,168,153	13,210,668	19,160,258	21,344,757	28,007,908	18,769,626	21,572,634
Apricots and peach kernels lbs.		27,854	13,551	7,939	18,769		67,164	11,926	250,075			65,175	32,606
Coconuts in the shell.....Dollars	\$1,246,463	\$1,298,970	\$1,704,262	\$2,012,203	\$1,793,713	\$2,150,500	\$1,593,666	\$1,891,328	\$2,583,660	\$2,490,368	\$4,053,282	\$4,230,221	\$2,283,660
Coconut Meat broken or Copra not shelled, desiccated or prepared.....lbs.	23,742,518	20,830,539	38,081,984	64,506,787	34,283,592	44,459,158	88,680,382	108,507,765	247,043,127	430,649,332	258,637,781	215,188,461	189,320,960
Desiccated, shredded, cut or similarly prepared.....lbs.	5,461,602	5,985,308	6,661,850	5,396,465	6,826,095	9,307,924	5,866,806	7,947,390	10,491,796	20,269,909	29,637,674	30,631,029	35,633,497
Cream and Brazil.....bu.	409,644	461,496	277,679	21,601,008	11,933,139	11,431,531	21,483,319	12,489,217	16,238,023	11,282,068	13,076,338	13,035,436	17,102,046
Filberts—not shelled.....lbs.	7,365,837	10,026,961	10,064,987	8,375,890	8,586,278	10,365,072	10,922,248	10,003,552	16,468,547	7,432,524	16,747,349	14,665,364	14,082,336
Shelled.....lbs.	1,364,669	1,413,381	2,332,606	1,368,635	1,450,620	1,798,147	1,722,705	1,259,540	2,280,757	4,245,863	3,778,906	4,711,283	4,233,107
Marrons, crude.....lbs.	10,270,386	9,968,879	14,845,345	10,157,321	18,549,257	12,549,959	15,754,796	15,754,796	6,275,030		6,021,146	29,484,637	23,340,968
Olive nuts, ground.....Dollars	\$580	\$478	\$236	\$206	\$342	\$385	\$25	\$112	\$420			\$132	\$189
Palm and Palm Nut Kernels ..	\$2,752	\$6,907	\$5,744	\$7,970	\$4,872	\$23,127	\$31,900	\$1,104,885	\$626,435	\$16,905,313	\$5,610,956	\$8,329,034	\$230,194
Peanuts or Ground Beans.....lbs.	7,326,371	11,297,172	11,055,823	12,660,433	12,140,612	17,298,778	14,075,387	9,623,411	7,710,082	1,970,797	5,667,354	7,222,486	4,803,677
Shelled.....lbs.	1,302,919	16,069,919	7,821,505	3,127,829	7,823,173	21,819,101	11,685,507	18,739,888	27,548,928	67,746,891	24,179,667	163,562,466	39,486,666
Pecans.....lbs.	1,480,289	3,349,469	2,353,087	2,607,227	1,903,434	2,621,161	2,632,539	1,265,392	4,076,833		2,194,620	1,682,390	1,682,390
Walnuts—not shelled.....lbs.	17,432,885	23,269,974	21,146,116	22,208,845	16,363,046	16,134,211	20,868,326	22,610,418	17,177,862	3,304,003	21,235,076	17,339,096	31,821,639
Shelled.....lbs.	10,960,968	10,960,968	11,244,054	10,713,286	10,083,622	11,636,063	10,552,956	13,445,790	12,257,593	9,707,401	10,260,899	13,972,917	18,264,069
All other shelled or unshelled, not specially listed.....lbs.	9,938,337	3,584,544	2,982,663	3,050,989	3,600,056	7,426,313	3,272,492	2,772,589	2,769,634			3,763,973	3,890,676
Total of nuts Imported Dollars	\$5,549,987	\$12,775,186	\$14,265,572	\$15,626,485	\$13,506,307	\$19,815,713	\$16,865,244	\$20,594,434	\$33,697,688	\$49,930,283	\$57,499,09	\$58,762,801	\$37,378,572

a—pounds.

Nut Culture Information

Reprint folders on topic discussed in American Nut Journal. 10 Cents Each

Grafting and Budding the Walnut—U. S. Dept. Agriculture.

Pecan Areas of the United States—W. P. Reed.

Walnut Trees For New England—Dr. Robert T. Morris.

Some Walnut Varieties—Dr. L. D. Batchelor.

Chip Buds For Nut Trees—Charles L. Edwards.

Grafting, Budding, Topworking—Dr. W. C. Deming.

Breeding Chestnuts for Disease Control—U. S. Dept. Agr.

Advent of Nuts as Staple Food—Dr. J. H. Kellogg.

Underworking Nut Trees—Charles L. Edwards.

The Ubiquitous Black Walnut—T. P. Littlepage.

Average Yield of Pecan Orchard in S. W. Georgia.

Value of Nuts As Food—Dr. W. C. Deming.

Improved Black Walnut a Good Investment—Henry Stabler.

Status of Pecan Industry—C. A. Reed, U. S. Nut Culturist.

Sources of Supply of Hazel Nuts—Bulletin Imperial Institute.

Top-Grafting the Walnut Tree—Ferd Groner.

Black Walnut As a Meat Producer—Henry Stabler.

Outline of Northern Nut Culture Activity—Dr. W. C. Deming.

Establishing the Filbert Grove—George Dorris.

Top-Working Northern Pecan Trees—J. F. Wilkinson.

Nut Trees for Highways and Public Places—W. S. Linton.

American Nut Culture—24-page Pamphlet Survey.

East Texans Reap Fortunes on Pecans.

Hazel Blight—Dr. Robert T. Morris.

American Nut Industry—C. A. Reed, Nut Culturist.

What Nuts to Plant in Northern States.

Pecan Rosette; Practical Treatment—W. A. Weaver.

English Walnut: Where To Plant It.

Nut Tree Grafting by an Easy Method—Dr. Robert T. Morris.

Purchase of Chestnut Tree With Reference to Blight—G. F. Gravatt.

Quick Results in Pollenizing Pecans—E. E. Rislen.

Nut Trees to Reduce Food Costs—Chas. Lathrop Pack.

How To Guard Against Faulty Nuts—Harvey C. Stiles.

The Romance of the Pinon Nut Industry in New Mexico

Soil Fertility; Fertilizer Problems in Pecan Culture—J. J. Skinner, U. S. Department Agriculture.

The Future of the American Grown Filbert—Richard H. Turk.

AMERICAN FRUITS PUBLISHING CO., 39 State Street, Rochester, N. Y.

PECAN SCAB EXPERIMENTS IN 1922

J. B. DEMAREE, ASSISTANT PATHOLOGIST PECAN DISEASE FIELD
STATION, U. S. DEPARTMENT OF AGRICULTURE,
THOMASVILLE, GEORGIA

Owing to reports of a few unsuccessful attempts for controlling pecan scab by spraying, some growers are considering the feasibility of spraying with some degree of scepticism. It has been the practice of the growers in the past to postpone any attempt to prevent the ravages of this disease until it was firmly established in their trees. After the total loss of one or more crops by scab, the trees were sprayed. But owing to the heavy infection of scab from several years accumulation the trials were only partially satisfactory, consequently spraying was discontinued. While if the work had been continued for two or more years in succession so as to reduce the number of sources of infection, the results undoubtedly would have been more satisfactory.

GOOD SPRAYING RESULTS

The results of the last season's spraying experiments should lend encouragement to those contemplating spraying. While these results are quite satisfactory, the writer does not wish to imply that the problem has been completely solved. There are several features that must yet be worked out. We must know more about the efficacy of the strong dormant spray; the advantage of spraying at the time the buds are swelling or during the leaf unfolding season and before the pistils are receptive; we should know if it will be advisable to delay the first application until the first appearance of scab; we must know more about the efficacy of lime-sulphur solution, especially when modified with bluestone; we must have more data on the cumulative effect of spraying and, if we continue to use Bordeaux mixture, know more definitely the weather conditions that may induce foliage injury when used.

The writer has done some work on all the above listed points but more trials must be made before a standard spray schedule can be formulated that will be adaptable to various conditions and localities.

The past season's spraying operations have contributed several very important features relative to controlling pecan scab and we are employing this means of supplying the growers with the new information.

The 1922 pecan scab spraying trials were conducted at Baconton and DeWitt, Georgia.

SPRAYING TRIALS AT BACONTON

The work at Baconton was done on fifteen year old Delmas trees, belonging to Mr. Harry U. Jackson. These trees had been scabbing badly for the past three years. The 1921 Delmas crop in this orchard was a complete failure on account of scab. That year the disease appeared in the orchard early in the season and, as the season advanced, became so severe that most of the crop blackened and dropped prematurely and only a very few nuts of a heavy crop matured. These trees were sprayed twice with Bordeaux mixture during the latter part of the summer, but evidently the spray was applied too late to offer any protection to the 1921 crop. It is, however, an extremely significant fact that the scab did not appear in this orchard during the past season (1922) until about the first of June. On nearby unsprayed Delmas trees the disease appeared a month sooner. Delmas trees at DeWitt, Ga., only three miles distant, that were not sprayed the year previous, but had two applications in May, 1922, had more scab by the first of June than the Delmas at Baconton before receiving their first application. This is a strong confirmation of previous evidence of the cumulative bene-

ficial effect of spraying. It is the writer's opinion at present that the pecan scab fungus hibernates during the winter mainly as spots on the twigs. Spraying prevents the formation of the spots and consequently largely eliminates the sources of the initial spring infections.

We applied the first application of a 3-6-50 Bordeaux spray in the Baconton orchard June 13th. Only an occasional scab spot could be found on the leaves at that date and no spots were found on the nuts. Some scab appeared as the season advanced on both the leaves and nuts. The second application of a 4-6-50 Bordeaux mixture was applied July 6th. The third application was applied July 27th. Modified lime-sulphur solution (one gallon of concentrated lime-sulphur solution added to a 1-2-50 Bordeaux mixture) was substituted for the standard Bordeaux mixture in the third application. The fourth and last application was applied August 23rd. The modified lime-sulphur was again used on one-half of the trees and a 4-6-50 Bordeaux mixture on the other half. It is very possible that this last application could have been omitted, as dry weather prevailed during the latter half of August and through September.

COMPARATIVE RESULTS

The plot receiving two applications of Bordeaux and two of lime-sulphur was equally well protected from the disease as the plot given three applications of Bordeaux and one of lime-sulphur. In the final analysis nuts from the plot sprayed with two applications of modified lime-sulphur solution were somewhat better than those in the plot sprayed three times with Bordeaux and one with lime-sulphur. This was evidenced as indicated in the following table:

Spray Used	No. Nuts per Lb. Filling	Qualities	Texture of Kernel	Color of Kernel	Percent of Kernel to Nut
Bordeaux twice.....				Excel-	
Lime-sulphur twice..50	95	100	lent		57.56
Bordeaux three times					
Lime-sulphur once...55	90	90	Good		52.8
Check78	20	15	Poor		

The crop on the check trees was practically a failure. Over one-half of the nuts fell off prematurely. Those that remained on the trees until harvest were small, averaging seventy-eight nuts per pound and 51% of these were either devoid of kernels or the kernels were badly shrivelled, making them unmerchantable. The balance were merchantable, but of low quality, being light weight and the kernels more or less chaffy or spongy.

FOLIAGE NOT HURT BY SPRAYING

Under certain weather conditions Bordeaux mixture, when applied to pecan trees as a summer spray, causes serious foliage injury. The writer wishes to emphasize the fact that there was no evident foliage injury at any time during the season in these sprayed trees that could have been attributed to the Bordeaux mixture. On the contrary, the spray undoubtedly had a beneficial effect on the foliage as the sprayed trees retained their foliage much longer than did the checks. At harvest time (November 24th) the check trees were practically defoliated while the sprayed trees retained an abundance of leaves.

The total cost of spraying the trees in the Baconton experiment did not exceed twenty-five cents per tree per application, or one

dollar per tree for the season. This estimation of cost includes supervision, labor, spray material, teams, depreciation of the machine, gasoline and oil. The trees averaged twenty-two pounds of pecans to the tree and were sold at forty cents per pound, leaving a balance of \$7.80 per tree in favor of spraying. It should be understood that the cost of spraying would have been no greater if the size of the crop would have been double or treble. The Baconton pecan scab spraying experiment was considered highly successful and the writer feels confident that the experiment can be iterated next season with even a greater degree of ease as the thorough spraying this past season has undoubtedly reduced the "carry-over" to a minimum.

EXPERIMENTS AT DEWITT

The spraying work at DeWitt was conducted in the G. M. Bacon Groves, now owned by the Gilligan-Chipley Company. This work was planned in part to study the efficacy of some sulphur sprays in comparison with Bordeaux mixture. Most of this work was done on Delmas trees that had been scabbing very badly for the past five years. Consequently, the experiment was handicapped on account of a heavy initial infection carried over from the year previous. Each plot consisted on an average of fifteen trees each. The sprays used were Bordeaux mixture, lime-sulphur solution, atomic sulphur, self-boiled lime sulphur and modifications of lime-sulphur and Bordeaux. Neither the atomic sulphur nor the self-boiled lime-sulphur was sufficiently effective to warrant their further use in badly infected orchards. Self-boiled lime-sulphur modified with two pounds of copper sulphate added to each fifty gallons of the spray, proved to be more effective than the straight self-boiled lime-sulphur but was not considered more effective than a weak Bordeaux spray. The lime sulphur solution gave promise of considerable merit as a pecan scab spray. Its weak point seems to be its inability to adhere to the nuts and foliage under the strain of a hard rain. It is probable, however, that its sticking qualities can be greatly improved by the addition of one pound of dissolved copper sulphate to each fifty gallons of spray and it is also believed that by this modification its fungicidal powers will likewise be improved.

It was the original plan to increase the strength of the lime-sulphur solution from one gallon to one and one-half gallons to each fifty gallons of water as the season advanced, but it was found after the second application that five quarts caused some injury to the foliage. On this account the strength was reduced to one to fifty and the weaker strength used the balance of the season.

One plot was sprayed alternately with Bordeaux mixture and lime-sulphur solution. This controlled the disease quite satisfactorily, but some Bordeaux injury occurred.

ENCOURAGING RESULTS

Five plots, or about seventy-five trees, were sprayed with Bordeaux mixture. Two stickers and three different strengths of the spray were employed. The result of these sprays was all that could be desired as far as effectiveness is concerned. Nuts fell prematurely on account of scab. The size of these nuts was almost normal, averaging about fifty-three nuts per pound, and over one-third graded oversize, that is, being over fifteen-sixteenths of an inch through the shortest diameter. The quality of these nuts was only fair, but all were merchantable and sold at forty-one cents a pound as ungraded nuts. The low quality of these pecans was thought to be due to spray in-

jury that occurred at the time the fourth application was applied, June 28th.

As far as could be observed, no injury was caused by any other application either before or after the fourth. The most pronounced manifestation of this injury was that about one-fourth of the older leaflets became yellow and dropped during July. This July leaf drop did not occur on any of the sulphur sprayed trees. Some trees not included in the main spraying experiment received their second application of Bordeaux spray June 28th and were injured as severely as those sprayed for the fourth time. This would indicate that the injury was not due to the cumulative poison from several applications, but rather that the weather condition prevailing during the last week in June was in some manner contributory to the injury.

Bordeaux mixture is the most effective spray we have yet used as a pecan scab preventive, but owing to the ever present danger of some foliage injury, it seems imperative that we should limit its use as far as possible and compromise by substituting some less effective spray that will not cause the serious injury. The trials at Baconton, Georgia, indicate that when the disease is once under control we may safely reduce the number of Bordeaux sprays at least to the first two applications, which are undoubtedly the most important ones, and then use lime-sulphur solution for the later applications.

Bordeaux mixture carrying four pounds of copper sulphate in each fifty gallons of spray was more effective than a spray with three pounds of copper sulphate. On the other hand, the injury was as severe in the trees sprayed with the weaker solution as in those trees sprayed with the standard strength spray.

ADHESIVES AND SPREADERS

Three plots of fifteen trees each were given over to a preliminary study of adhesives and spreaders. All these trees were sprayed with a 3-6-50 formula of Bordeaux mixture. To the spray of one plot one and one-half pounds of fish-oil soap were added each fifty gallons of spray, to a second plot six ounces of a calcium-casein preparation were mixed with each fifty gallons of spray. Straight Bordeaux mixture with no adhesive was applied to the first plot, which served as a check. The addition of soap or casein to the Bordeaux mixture did not at any time during the season or at harvest show any evidence of increasing either the effectiveness or the adhering properties of the Bordeaux mixture spray.

Rosin-fish-oil soap was given a thorough trial during the beginning of the season. This form of soap produced an undesirable gummy precipitate when added to the Bordeaux mixture which persistently clogged the valve of the spray pump. Owing to this undesirable feature of the rosin-fish-oil soap, which was thought to have been due to some ingredient present in the deep well water used, we were compelled to abandon it and substitute the plain fish-oil soap. This latter form of soap gave us no further trouble.

COST AND EQUIPMENT

Two questions are ever in the minds of growers contemplating spraying for pecan scab. First is the cost of spraying and second is the number of trees of a susceptible

variety that will justify one to equip for spraying.

The first item is a difficult one to handle, owing to the many variable factors that enter into the problem. The cost will depend upon the size of trees, prevailing price of materials, distance of the orchard from the water supply, facilities for making the spray and refilling, experience and caliber of men handling the nozzels and working condition of the machine. Working on the basis that labor, supervision, as well as materials, must be accounted for, the average cost for spraying fifteen to twenty year old trees should not exceed twenty-five cents per tree for each application. This estimated cost can be greatly reduced if cost of supervision, labor and teams will not need to be considered.

The second item in reference to the number of trees of a susceptible variety one should have to justify purchasing a sprayer is a less complicated one. In making this computation we may select the results of the Baconton experiment as a basis. There we used a medium powered machine costing at present \$550. To enable one to realize ten per cent interest on the investment of such a machine, he should have from seven to ten trees which will yield him on an average of twenty-two pounds per tree, selling at forty cents per pound for ungraded nuts. Also computing on the same basis the proceeds from seventy-five large trees should pay for a machine the first season.

The above estimation, of course, is only applicable to a variety that is very susceptible to scab and as a rule where its entire crop is destroyed on account of the damage done by the disease. Delmas, Georgia, Pabst and Schley are good examples of varieties that are extremely susceptible to scab in certain localities.

Some growers claim that only the extensive orchardist can afford to purchase equipment and prepare for spraying. There is no evidence to support such arguments, on the other hand it is the writer's opinion that the small grower can as a rule spray the more economically.

The Northern Nut Field

The Scientific American, December, 1922, page 382, says:

"Chiefly in the East and Middle West there are 81,000,000 acres of idle land, good for nothing but growing trees.

"A century from now our population will be 225 million. The prophecy is startling because it suggests possible hunger and even famine for our future. At present with less than half these numbers, our food production is only about equal to our domestic consumption. Unless we institute revolutionary practices to enhance production we may look for it to fall behind.

"Present indications are that we are rapidly slipping into the class of food importing nations. This means that unless we are able to reverse the tide, we must readjust our social, economic and industrial organizations to record with this new condition."

Commenting on this H. R. Mosnat, Chicago, Ill., says:

"All large tracts of good land profitable to cultivate, are now cropped. More food must

come from more intensive utilization of the land available.

"The 81 million acres of tree lands in the east and middle west does not include about 25,000,000 acres of over-flow lands, much of which was once the home of wild black walnut. Much of this land is suitable for nut growing.

"At only \$100 per acre per year, which is easy with hardy nuts of improved varieties, and which will bear almost as soon as an apple tree, \$100 an acre is not at all high as an average.

"There is a pecan-hickory hybrid at Burlington, Iowa, and the nuts from that one tree sold in 1920 for \$90. Twenty such trees can grow on one acre.

In California the English walnut crops run \$100 to \$300 per acre.

To produce the 47 million dollars worth of imported edible nuts at \$100 an acre would require only 470,000 acres of the more than 100,000,000 acres of land in the east and middle west fit for nothing but trees. That is less than half of one per cent.

"Walnuts on over-flow lands save drainage and dykes. In Iowa there has been so much drainage that the ground level of water has been lowered 10 to 12 feet, and in dry years crops burn up, because the ground water is too far down to be of use as it used to be. The same conditions exist in other states.

"In the West where the danger of blight is not present, American sweet chestnuts are doing well as far north as Chicago, and 250 miles west of Iowa. They grow on higher land. Pecan-hickory hybrids are doing well in the same territory on lower lands. Black walnuts thrive on any fertile land in the Corn Belt, where there is plenty of moisture, but not too much. Occasional floods do no harm to black walnut trees. They are hardy as far north as southern Minnesota. But easier cracking varieties of black walnut are very much needed. Existing named sorts are an improvement over the wild nuts, but still can be much better. It will require work in hybridizing to produce such improved varieties of black walnuts."

Iowa and Illinois are the richest agricultural states in the Union, and the basis of their wealth is corn, yet it takes forty bushels of western corn to buy one bushel of southern pecans, and when the pecan trees are once established, the southern farmer can grow a bushel of pecans as cheaply as the western farmer can grow a bushel of corn.

Buddy Nut Trees

18 inches to 2 feet tall at \$50 per 100

For Spring Shipment

Cash with order

Japan Walnut Seedlings, 3 feet tall; \$25 per 100

Keso Nurseries, Clinton, Conn.

FOR SALE: 267 Acres of land

Containing 85 acres set in Budded Pecan Trees, 8 to 14 years old, practically all of which are bearing. These trees are of the following varieties: Stuart, Pabst, Success, Alley, Frotscher, Delmas and Schley.

Also tract of land on National Highway containing 110 acres of which 35 acres are set in Pecan Trees of the above varieties, about ten acres 14-year-old trees all bearing.

Balance of trees from two to six years old.

This tract contains one six-room dwelling, with necessary barns and outhouses; also two 3-room cottages for tenants. Both tracts are located 2 miles from limits of progressive city of 5,000 population.

To be sold for division.

EUFULA PECAN Co., Eufaula, Ala.

ACTIVITY IN NORTHERN NUT CULTURE GROWING APACE

The Great Corn Belt Invites

In H. R. Mosnat, Chicago, Ill., the Northern Nut Growers Association has one of the live wires in nut circles. Mr. Mosnat is both a nut grower and a student; he is also a close observer. He realizes the possibilities in nut culture in the Northern States. He is contributing to newspapers and magazines lively articles on the importance of nut growing and the great need for providing nuts for food.

Mr. Mosnat is particularly an advocate of black walnut planting. Recently he had an article on this subject on the editorial page of the Chicago Tribune. Figured black walnut trees produce \$500 in timber in 25 years, he says. A planting of 500 such trees beats a twenty-year endowment policy and the first "premium" to pay is the last! There are about 10,000,000 acres of overflow lands in the Corn Belt that can be reclaimed, he believes, by planting to the "Glory Figured Black Walnut." This land at present is of little use. It averages about 1,500,000 acres each for such states as Illinois, Missouri, Iowa, etc. Mr. Mosnat believes that by using named sorts of black walnuts now propagated there is already opportunity for as large an industry in black walnuts on this waste over-flow land as the pecan industry has become in the South or the Persian walnut industry in California and the Pacific Northwest. The primary commercial black walnut area is almost the same as the Corn Belt, except that it does not extend as far north, especially in Iowa; but it extends southward clear across Missouri and also across Kentucky and Tennessee. The primary and secondary commercial black walnut areas are twice as large as the Corn Belt, at least, and these must contain more than 25,000,000 acres of over-flow lands.

"I am on the trail," says Mr. Mosnat, "of a superior variety of 'paper-shell' hickory, also a black walnut that cracks almost as easily as an English walnut. I want to do a lot of hybridizing work in native nuts in the Juglans family. That will take years, but no matter. I have had four years of Nursery experience with top-rooted trees, propagation and growing seedlings. Now I want to have a nut tree Nursery in Iowa. I have 10,000 parent tree seedlings in seed bed ready to work as soon as transplanted into Nursery rows on plenty of good land well located in East Central Iowa. Have orders for trees now.

"No one doing much in black walnuts in the great Corn Belt. Iowa is the greatest corn state, also the greatest walnut state. See 'Black Walnut, Its Growth and Management,' U. S. Dept. of Agri. Bul. 933 (Professional Paper), page 38 (table). Iowa has the most bearing black walnuts of any state in the Union, by far, and they bear the most too.

"Iowa is where the most profitable apple, the Delicious originated. There is a monument to the original tree which is still standing near Winterset, Iowa. That \$50,000 strawberry grew at Conrad, only about twenty miles from where I was born and raised and where I want to locate my nut tree nursery. So Iowa is the right place.

Hardy nuts is not a new subject with Mr. Mosnat. He has been in correspondence with Secretary Deming, Treasurer Bixby, Dr. Robert T. Morris, the late Dr. Dennis of Cedar Rapids, Ia.; S. W. Snyder, E. A.

Riehl, Prof. J. A. Neilson of Guelph, Canada; J. J. Kelsey and other members of the Northern Nut Growers Association.

Northern nut culture will receive a large amount of valuable publicity in the near future through articles Mr. Mosnat is writing for Thrift Magazine which goes to the S. W. Straus investors; Henry Ford's Dear-born Independent, Missouri Ruralist, American Fruit Grower, Country Gentleman, Breeders Gazette, Prairie Farmer, and perhaps Successful Farmer, Farm Journal and Popular Science Monthly. It is expected, too, that the Hearst Syndicate of 165 Sunday newspapers will use one of Mr. Mosnat's articles. He has promised to get for hardy edible nuts grown in North America, a million dollars worth of publicity.

It may be that Mr. Mosnat will grow nut trees for several of the state departments of forestry. The fruit of these would be the Glory Figured Black Walnut, with curly grain wood. Mr. Mosnat is connected with the American Institute of Agriculture, Chicago, Ill., which teaches marketing of farm products.

Mr. Mosnat wants some bitternut hickory to stratify and plant for experiments in the spring. He thinks they will make better stocks than shagbark hickory. He is very much interested in the Beaver hickory and the Burlington and Greenbay pecan-hickories. Mr. Snyder, Center Point, Ia., has the Greenbay. Mr. Snyder has told Mr. Mosnat that he is getting to think more of black walnuts than of any other hardy nut, and that he is advising young men to plant hardy nuts on their best land, because he knows of nothing that will pay them as well. He says they should go into it on a commercial scale and in a business-like way.

Mr. Mosnat has taken up the subject of hardy nut culture with Roger Babson and with Henry Ford.

Northern Pecans Plentiful

It is estimated that Gallatin county, Ill., shipped native pecans to the value of \$50,000 this season. M. C. Mitchell, a merchant of New Haven, bought pecans to the value of \$6,000 on a single day. Mr. Foltz of Shawneetown bought to the amount of \$2,600 and Mr. McMurchy 10,000 pounds. At the peak of the market the local dealers paid 22 cents a pound; later 18 cents.

How I Get A 100 Per Cent Stand of Nut Seedlings

Stratify in the usual way, and in the spring make a cold-frame and put in about one inch of fine sand. On this spread the nuts as closely as they will allow, covering with two or three inches more of the sand. Water the bed thoroughly, and cover with hot-bed sash, keeping the sand moist at all times. The sun shining on the glass will soon heat the sand, and in a short time you will see the nuts sprouting up.

Work them all over by hand at this stage, removing the sprouted ones. The latter should be set out in the field at once by another party, so as not to leave them exposed to the air longer than can be helped. By this method one can get a solid stand, instead of the patchy rows that often occur when the nuts are planted directly in the drills. Some may think the above method too much work, but they will be more than repaid for their trouble by the saving of waste land. The nuts that do not sprout the first time can be put back in the sand, and it will be found that most of them

ANOTHER NORTHERN NUT ORCHARD

Dr. Charles V. Paterno, New York City, is next in line in the Journal's serial announcements of establishment of nut orchards in the Northern States. He recently purchased 500 nut trees and has planted them, including 160 of the largest pecan trees supplied by J. F. Jones, Lancaster, Pa. He found it advisable to blast holes for the trees in planting. He used mostly top soil in filling in, taking every precaution in planting and hopes for good results. Last year Dr. W. C. Deming top-worked a hundred trees for Dr. Paterno.

Exposition Prize Winners

In the December issue of the Journal, S. W. Snyder reported the kinds and number of nuts exhibited at the Mid-West Horticultural Exposition at Council Bluffs, Ia., Nov. 13-18, 1922. At Mr. Snyder's request, Secretary R. S. Herrick, Iowa Hort. Soc., has supplied the following list of prize winners:

Snyder Brothers, Center Point, Ia.
Mrs. Seward Long, 510 South Ninth St., Burlington, Ia.
Minnie Oberman, Burlington, Ia.
Mrs. Pearl Mounce, Center Point, Ia.
John D. Sherwood, Ft. Madison, Ia.
Park Buckley, Strawberry Point, Ia.
Nick Hoglan, Center Point, Ia.
Albert C. Pomeroy, Lockport, N. Y.
John H. Witte, Burlington, Ia.
L. W. Vest, Blacksburg, Va.
Geo. W. Manahan, Sabillasville, Md.
John Edaburn, Center Point, Ia.
Earl Bond, Richland, Ia.
C. F. L. Clemons, R. No. 7, Davenport, Ia.
Conrad Vollertsen, Rochester, N. Y.
California Almond Growers Exchange, San Francisco, Cal.
Ed. Edris, Council Bluffs, Ia.

Pre-Holiday Prices

Early last month conditions in the New York market were reported as follows: One of the large St. Louis pecan distributors is carrying old Texas crop in barrels at 99c a pound. With a premium of 1c for 5 pound cartons. New crop halves are quoted only upon special request at 5-7c over 1921 nut values. Nuts in the shell have sold in a carload way in Chicago at 23½c, regular terms with most holders firm at 25-30c. Prices seem to be of secondary consideration with all indications pointing to record breaking price levels for the remainder of the season. Georgia shippers are making short deliveries.

will have sprouted by the next handling. Those that do not start should be discarded, as upon examination it will be found that most of them have soured. It has been the writer's experience that filberts are rather uncertain about germination. It seems all the same to them if they take from one to two years to sprout; so, after the first handling I always crack by hand all those which have failed to sprout, and plant the kernels in the seed-bed for a week or ten days; this will get most of them.

I make my cold-frame of 10-inch lumber, as I find this depth necessary to prevent the bed from becoming too warm. On very bright days it is all well to cover glass with a light covering; also having free ventilation directly under glass.

DAVID GELLATLY.

Gellatly, British Columbia.

If it relates to nut culture it should be in the AMERICAN NUT JOURNAL. Please send it in.

Improved European FILBERT PLANTS Now Available

We, ourselves, are now prepared to accept orders for our Improved European Filberts.

Heretofore our supply has been very limited and has been exclusively offered by L. W. Hall Co., Nurserymen, this city. And while the Hall firm will continue to offer our plants—the ONLY Nursery to whom we have accorded that privilege—increased production now enables us to offer of our product ourselves.

Our plants are carefully selected, dug, packed and shipped under the personal supervision and direction of our Mr. Vollertsen.

Each plant bears Originator's label of the variety.

Our price for 2 ft. and up plants is \$1.50 and for 3 ft. and up plants, \$2.00, F. O. B. Rochester, N. Y., cash with order. These prices and terms are the same as Hall's.

Our plants are splendidly rooted and finely branched—the kind that, carefully transplanted and given reasonable care and attention, will begin to bear abundant crops of delicious nuts within two to three years after transplanting, and regularly thereafter, indefinitely.

For grace and beauty, too, no more staple decorative shrub for lawn-planting can be desired than our Improved European Filberts.

Our Filbert Nursery is the only thing of the kind in the Western Hemisphere, the original 100 plants having been imported from Germany in 1911 by our Mr. McGlennon, and our Nursery developed from same by our Mr. Vollertsen.

After long years of careful experimental work and tests we are convinced that our Filberts are very hardy, having successfully withstood the severe Winters here, where the atmosphere is invariably very damp and frequently the temperature drops to considerably below zero.

Our Improved European Filbert is undoubtedly THE ONE nut-bearing plant wholly adapted to the more Northern latitudes.

In September 1922 the Northern Nut Growers' Association, in convention here, visited our Nursery and heartily endorsed our accomplishments and efforts as worthy.

The McGlennon-Vollertsen Filbert Nursery, 528 Cutler Bldg., Rochester, N. Y.

For Northern Commercial Nut Orchards

Answering a correspondent at Birmingham, near Detroit, Mich., Secretary W. C. Deming, of the Northern Nut Growers Association, says:

"One cannot expect English walnuts to yield as they do in California. At least no one yet has done it in the East. We can never compete with California in the English walnut, probably. It finds there its favorite Mediterranean climate, so unlike ours of the East. But the Chinese walnut is very promising because our climate is like that of China. It may be only a question of developing varieties. Hence the sending out of the seedling Chinese trees.

"I answer the same as to the pecan. The southern pecan will not even live in your climate. But the Iowa pecans promise good results, though varieties are not yet worked out. Indiana pecans are hardy but probably will not attain size in northern latitudes.

"The unbridled advertisements of a Rochester firm have led hundreds of people to think that English walnut and pecan growing are an established industry in the North. It is not so.

"The nuts to grow for commercial purposes are the black walnut, improved varieties, the improved European filbert, the Japanese walnuts, the hybrid chinkapins, the Chinese chestnuts and the shagbark hickories topworked on native hickories.

"There are some better nuts available than before the war, but the old standard varieties have not been displaced.

"Don't plant too much at first. Begin with an acre or two and learn what does best and how to take care of them. All nuts respond to heavy feeding and careful cultivation. For the English walnut it is an essential. The hickories are difficult to transplant and establish. That is why topworking gives so much better results. We advise and encourage planting of nut trees, but not plunging for profits. Experience must be acquired. One who begins will find it a fascinating pursuit. Let me know if I can help you further."

Livingston county, N. Y., farmers made money with an unusually large crop of black walnuts this season, by cracking the nuts and selling the kernels in New York City.

Two Pike County, Ill., Growers

John A. Dean, 75 years old, Pittsfield, Ill., writes entertainingly of his nut trees to his friend, T. W. Rodhouse, Jr., Pleasant Hill, Ill. Says Mr. Dean to Mr. Rodhouse:

I have growing on my place several kinds of nuts—black walnuts, pecans, butternuts and English walnuts. They have all been bearing for three or four years. I have some of the largest black walnuts I ever saw. I had lots of them this year. My pecan trees are 10 inches through at the ground and 100 feet tall and look fine. The nut trees will bear in about eight years from seed. The English walnut trees I bought from Green's Nursery, Rochester, N. Y. I am experimenting now with some Texas pecan trees.

Mr. Rodhouse writes us:

"I can hardly think of Mr. Dean's pecan as being 100 feet high. Am going to run over and look at it. Am going to call on P. C. Stark, eight miles from me. Have read with interest what Mr. Henninger says in the November issue of the *Journal*. I agree with him as to big work ahead for the Northern Association and greater activity by the members. I congratulate the Association on its fine meeting last September. In two months since the meeting greater progress has been made than in ten months before the meeting. I shall apply for membership the first of the year. Wonder if W. A. Thomas, Lincoln, Neb., cultivated his Japan walnuts. I see Mr. Kelsey, Clinton, Conn., says trees do best when one lets weeds grow. I planted black walnuts last winter, some on rough ground, some in rows. Cultivated and mulched those in rows this season and got twice the growth as compared with those in rough ground among the weeds.

Spreading the Light

Thomas F. Miller, Allentown, Pa., in renewing his two subscriptions for the *American Nut Journal*, says: "I always get two copies and am sure to have one on my file, while I give the other out to my friends to read it."

Food Going To Waste

A despatch from Pomeroy, O., Dec. 12th stated: "Thousands of dollars worth of hickory nuts and walnuts are lying on the ground in Meigs county waiting for somebody to pick them up and market them, it was reported here today."

If it relates to nut culture it should be in the AMERICAN NUT JOURNAL. Please send it in.

THE HICKORY

Owed to the Hickory Tree

It is proposed to have a Hall of Fame for trees, and why not? Trees have striven in the race for supremacy just as mightily as men have striven for renown. Many entries have been suggested by the various states, the oak, pine, poplar, sugar maple and many others; if selection has not been made for West Virginia, there is one tree whose worth and renown should be preserved for all time—the hickory nut tree. It is native in this state and grows to splendid proportions in our mountains and valleys. It was the war magazine of the Indians, the first inhabitants of this land; from its sturdy fibre were made bows and arrows, spears and handles for their tomahawks, while the squaws vied with each other in gathering its sweet nuts for winter food. To the pioneer white settlers it was invaluable, furnishing axles for their wagons and bows for the covered caravans; its fibre made brooms to sweep the puncheon floors, bottoms for the split-bottom chairs and splits for the most durable baskets ever made.

Who does not remember the hurry of the schoolboy to get to the big shellbark, and how proud he was when he beat the other fellow, and who has not heard of hickory nuts and hard cider on cold winter nights around a big fire with a hickory back log? And now, even in this day when steel has taken the place of almost all wood, hickory still furnishes the spokes for wagons and automobiles and handles for the implements of man. Its name should be entered in the Hall of Fame as one of the greatest trees that ever lived.—Edmund Sehon, in *New York Times*.

Nut Tree Planting in South Dakota

In a recent issue of the *Journal* mention was made of the planting of walnut trees in the vicinity of Yankton, S. D., by Judge G. W. Roberts of that city, who now sends us photographs of the planting of the first walnut in commemoration of the services of the Red Cross, by Miss Margaret Ward, Red Cross nurse, who was assisted in the planting by Miss Stella Jamison, secretary of the Red Cross Society and Miss Mabel Hatch, superintendent of Yankton county schools. Miss Ward is a daughter of the late Dr. Ward of Yankton College and a cousin of Rev. Charles Sheldon, Topeka, Kan.

American Nut Journal

COVERING NUT CULTURE

NORTH—SOUTH—EAST—WEST

AMERICAN FRUITS PUBLISHING CO., INC.
59 State Street - Rochester, N. Y.

RALPH T. OLCOTT, Editor and Manager
Official Journal Northern Nut Growers' Assn
Official Journal National Nut Growers' Assn

SUBSCRIPTION RATES
One Year, in advance.....\$2.00
Canada and Abroad..... 2.50
Single Copy20

ADVERTISING RATE
Per column inch.....\$2.80
Forms Close 10th of each month

ROCHESTER, N. Y. JAN. 1923

NUT ASSOCIATIONS

California Almond Growers' Exchange—President, G. W. Pierce; manager, T. C. Tucker, 311 California St., San Francisco.

California Walnut Growers' Association—President, C. C. Teague; secretary, W. T. Webber; manager, C. Thorpe, 1326 East Seventh St., Los Angeles, Cal.

Georgia-Florida Pecan Growers Association—President, J. M. Patterson, Putney, Ga.; vice-pres., A. C. Snedeker, Blackshear, Ga.; sec'y-treas., J. S. Wight, Cairo, Ga.

National Pecan Growers Association—Pres., Charles A. Simpson, Monticello, Fla.; vice-pres., J. M. Patterson, Putney, Ga.; and E. C. Butterfield, Winona, Tex.; secy., J. Lloyd Abbot, Spring Hill, Ala.; treas., J. Slater Wight, Cairo, Ga. 1923 meeting, Jacksonville, Fla., Oct. 2-4, 1923.

National Pecan Growers' Exchange—President and manager, William P. Rullard, Albany, Ga.; vice-pres., J. B. Wight; secy-treas., A. D. Galt.

Northern Nut Growers' Association—President, James S. McGlennon, Rochester, N. Y.; vice-pres., J. F. Jones, Lancaster, Pa.; treas., Willard G. Bixby, 32 Grand Ave., Baldwin, N. Y.; secy., Dr. W. C. Deming, Georgetown, Conn. 1923 convention, Washington, D. C., Sept. 26-28

Southeast Georgia Pecan Association—President, Dr. W. H. Born; vice-pres., Col. G. H. Harris; secy, J. H. Girardeau, McRae, Ga.; treas., E. F. McRae.

Texas Pecan Growers' Association—President, H. G. Lucas, Brownwood; vice-pres., John P. Lee, San Angelo; Secretary, Oscar Gray, Waxahachie.

Western Nut Growers' Association—President, Ferd Groner, Hillsboro, Ore.; secy-treas., C. E. Schuster, Corvallis, Ore.

An article of special value to pecan growers is that by J. B. Demaree, assistant pathologist, U. S. Dept. Agr., Thomasville, Ga., on "Pecan Scab," in this issue. It is the practical work by Government reports that is enabling pecan growers to cope with difficulties and to develop the industry intelligently. This Government aid is highly appreciated by the growers.

When the Government decided finally late in November to make the transfer of the station to Georgia, Mr. Woodruff said, in connection with the fine exhibit of more than one hundred and twenty kinds of pecans recently made at the Texas A. & M. College: "They have taken our experiment station away from us. Now we are going to whirl in and show them what real pecans look like."

Growing Nuts at Eighty

The old notion that a man past three score years old will not live to see nuts from trees planted when he is at that age was long ago exploded. A nut tree will bear as soon as will many fruit trees. L. E. Chase, 80 years old is successfully producing pecan nuts in Louisiana.

Just mention AMERICAN NUT JOURNAL.

FORESTRY COLLEGE TO STUDY NUTS

The Northern Nut Growers Association has long urged that experiment stations take up the scientific investigation of nut culture. Government institutions have facilities for this work to much greater extent than have individuals or groups represented in associated activity.

It is with special interest that our readers will learn that the propagation of nut trees for food and wood products will be started in an experimental way by the New York State College of Forestry at Syracuse University.

The College experiment stations cover practically all climatic conditions in the state from the Adirondacks in the north to the central section and the southern tier of counties. The research work will be directed by Prof. John W. Stephen, head of the silvicultural department of the forestry college. The first trees to be experimented with will be the Japanese butternut and the western walnut. Both are known to have done well in the Lake Ontario district.

It is the vision of the forestry college that nut trees will become a more valuable resource than they have been and that this benefit to the people might be promoted by scientific study of the trees under varying conditions.

WHAT A BUSY MAN IS DOING

Dr. Robert T. Morris, New York City, of the Northern Nut Growers Association, favors the suggestion that the Association become a branch of the American Association for the Advancement of Science. He is of the opinion that branches of the Northern Nut Growers Association should join groups to attend fairs in their respective states and make exhibits. He is making talks on Nut Culture at every opportunity and is procuring Association members and subscribers to the *American Nut Journal*. He is trying to interest women in the Association and is willing to raise nut trees for premiums. He will try to organize at least one state society.

Now this is certainly some program for a busy man. Those who know Dr. Morris well know something of his many important activities in New York City and elsewhere.

If a man as busy as is Dr. Morris can find time to accomplish and still further to undertake what he is doing, the rest of us can easily do our bit.

ANOTHER NORTHERN NUT ORCHARD

Our attention to the remarkably successful results attained in Persian walnut culture by D. H. Hulseman, Silverdale Nut Ranch, Lakeside, Wash., has been directed by Charles O. Henninger, Indianapolis, Ind. In response to our inquiries Mr. Hulseman writes:

"I have grown walnuts here on Lake Chelan, State of Washington, for twenty years and never had a crop failure. My crop is always sold one year in advance, directly to homes. I find walnut growing is most profitable of all.

"Grafting or budding of trees is all right after you have got what you want, so as to have an improved orchard, but you cannot have the most desirable nut unless you grow it from the seed.

"I now have two new walnuts. Have never seen better. One nut is the largest I have ever seen grown on a tree in its second year. I am sending you sample of the other nut referred to. It surely is a fine nut. It is a new Persian Franquette in real.

It took me ten years to get it. This is a third generation nut on my ranch.

"The seedlings certainly are most successful. Grafted stock has been tried, but it seems to be a failure here. My trees are all hardy. I now have more than six hundred trees in my orchard and you could not buy me out."

The sample of nuts Mr. Hulseman sent us are as fine as we have ever seen. Large and perfect in appearance as to both shell and kernel, the latter is of high quality as to color, size and richness. This is all true of all the samples.

The Hulseman New Franquette and the Hulseman Chelan Kid seem to be the very last word in Persian walnuts. It does not seem that these can be excelled. Certainly Mr. Hulseman has the nuts to back up any claim he makes.

TWO NEW CROSS-BRED PECANS

Samples of Success pecans, grown as C. Forkert, Ocean Springs, Miss., grows them, came to our desk last month and again clearly demonstrated that the Success pecan is a remarkably fine nut. It is a very large pecan and at the same time a nut of high quality in every way. It is unfortunate that in some sections—as in Georgia and Alabama—it has been found that it does not do as well.

It would seem that the Success pecan is good enough, but Mr. Forkert has endeavored to improve upon it. His patient and painstaking pollenizing experiments with pecans have long been the admiration of the pecan industry. Perhaps no pecan grower has undertaken what he has in this line. Many years must elapse before he gets results from this work. But he began long enough ago to reap returns now.

The Success pecans from Mr. Forkert's grove are not excelled by any variety that comes to our desk. And now he has added some remarkably fine cross-bred varieties, samples of which are before us.

His cross of Jewett with Success, from tree which has borne for several years, proves to be a valuable addition to the list of commercial pecans. The nut is of good size and good quality. So far it has proven resistant to scab and a very dependable variety. Mr. Forkert has named it "Dependable."

The Russell crossed with Success, named "Desirable," is another good pecan, large and well-filled; the tree is a good grower and bearer.

The Success and Columbian and the Stuart and Success trees bore the first nuts this season, so not much can be said about them, except that they are large, fine nuts. The Stuart and Success especially is a very inviting nut, the tree very promising.

Other cross-bred trees under observation in Mr. Forkert's experimental groves bore their first nuts this season, but some of these are only of average size and quality, and more time will be required to determine their worth. The experiments by Mr. Forkert are of great value to the industry.

J. B. Gill of the U. S. Bureau of Entomology has established a laboratory at Thomasville, Georgia, and will devote his time to a study of pecan insects. F. M. Scales, of the U. S. Bureau of Plant Industry, in conjunction with J. B. Demaree, assistant pathologist, is planning to make a preliminary study of the soil flora in pecan orchards in view of determining what relation, if any, the soil organisms have with pecan rosette. This work was started this month.

The Round Table

A Nut Enthusiast at 90

Editor American Nut Journal:

Enclosed find \$1.00 for which please send some copies of the *Journal*. Would like some containing articles on the Persian walnut and on selected varieties of the hickories, and the better black walnuts. I have not taken the *Nut Journal* for a few years account of loss of eyesight and am not able to read. I am 90 years old and can only see a little blur on the white paper. I use a dark paper to draw down over my lines to keep them from running together. The writing is done like the fellow built his barn—by guess and by gosh. I still maintain my interest in nut culture and think that every nut grower should have the *Journal* if he can read. Just now I am trying to get the community interested in beautifying.

Our roads are laid out four rods wide and two rods are used for travel and traffic. The other two rods are left to weeds. They should be planted to nut trees. I hope to see some start made in that direction.

E. M. VAIL.

Kewanee, Ill.

Dec. 15, 1922.

Fuel Value of Woods

Editor American Nut Journal:

I think you may have to revise your statement, page 87 of December *Journal*, regarding the fuel value of the different species of wood. I think osage orange, or bois d'arc comes first, hickory and pecan next; I would place two or three of the oaks, also sugar maple, ahead of the chestnut which burns with a lively snapping fire, but does not last long. The blackjack oak of the sandy districts of Central Illinois may give out more heat than even hickory.

Our worst enemy—as farmers and fruit growers here—is the average city man, out with his gun or family for a pleasure ride or hunt. He thinks that a fruit grower, with his abundant crop, ought not to object to his taking a few baskets and sacks of fruit and nuts wherever he finds them, and acts accordingly even where trespass signs are posted.

BENJ. BUCKMAN.

Canadian Nut Exhibit

Prof. J. A. Neilson, Ontario Agricultural College, Guelph, Ontario, Canada, presided at an exhibit of nuts of Canada, made at the Royal Winter Fair in Toronto, Nov. 22-29, 1922. He says:

"I am pleased to state that our exhibit attracted a great deal of attention and had I been able to stand continuous talking I could have had a continuous audience from 10 a. m. until 10 p. m. The interest shown in our nut collection is very encouraging to me and indicates that there are large numbers of people who would like to grow nut trees.

"I am preparing a paper on nut culture for the Ontario Horticultural Society meeting in Toronto, February 1-2, and am planning to show the same collection of nuts at this meeting as was shown in Toronto, with possibly a few additions."

The Canadian Horticulturist had this account:

No single horticultural display at the Royal Winter Fair commanded more attention than that staged by the horticultural department of the Ontario Agricultural College. The limited frontage apportioned to that display was crowded at all times with

NUT-GROWING IN BRITISH COLUMBIA

Editor American Nut Journal:

Having become a subscriber to your *Journal*, and noting that you are interested in finding out what is being done in nut-growing in Canada, I thought you might like to hear what success I have had in nut-growing in the Okanagan Valley of British Columbia.

In 1905 I planted a few Japanese walnuts, and from these raised eleven seedlings. These were set out along a roadway, thirty feet apart; they grew well, commencing to bear about five years ago. The majority proved to be hybrids, two heart nuts, two English-Japs and two butter-Japs; while the balance bear small nuts of the Sieboldi type. These trees are all hardy here, and have never suffered from frost damage. Both the English-Japs and the butter-Japs are as large as butternuts. The heart nuts are large, and the trees bear heavily each season. From one tree, I harvested 60 pounds of dry nuts this season. When in the husks they filled a forty-gallon barrel.

In the spring of 1919 I set out two dwarf Praeparturian walnut trees, which succeeded well, and commenced bearing in 1921, and I also had a crop again this season. The nut is small to medium, with thin shell, and meat of good quality. These trees are perfectly hardy in this part of the district.

In 1907 I obtained a few filbert nuts grown in British Columbia from stock which originally came from Europe, under the name of Pearson's Early Red. These grew rapidly, and in a few years I set them out permanently in rows 8 x 15 feet. They soon came into bearing, and have never missed a season since. They are fine large bushes now, and some will have to be removed, so as to leave them 16 x 15 feet. The nuts are

well filled, large and oblong in shape. They sell readily at from .30 to .60 per pound green; that is, in the husks.

I have four American sweet chestnut trees, which I raised from seed. They are about 10 years old now, and one of them bore this past season. The nuts, though small; are sweet, with a pleasant nutty flavor. Our winters do not seem to affect these trees.

In the spring of 1920 I obtained three one year old Ridenhower almond trees from the Vincennes Nurseries, Indiana. They took hold and grew into fine large trees the first year. This season, 1922, one of them bore about a dozen nice almonds. That is going some, to bear the year after planting. This variety blooms at the same time as the Triumph peach, which I think can be used to fertilize them, as the blooms are very similar.

Have tried the Major pecan here, but with poor success so far.

My seedlings of the black walnut, butternut and hickory are doing well.

Scattered throughout the Okanagan Valley are to be found bearing trees of the Franquette and Mayette walnuts. Also Spanish chestnuts, several varieties of almonds, black walnuts and filberts. In fact, nut trees of various kinds seem to be doing well in all apple-growing sections of the province, and I feel sure that British Columbia has a bright future in nut growing.

DAVID GELLATLY.

Gellatly, British Columbia,

The 1922-23 nut crops in Greece are estimated in a report from the American consul at Athens as follows: Filberts, 395,000 pounds; walnuts, 1,101,000 pounds and almonds 1,000,000 pounds.

persons interested in the fruits, flowers, vegetables and nuts there shown, particularly in the nuts, and anxious to gain information from the man in charge.

J. A. Neilson, lecturer in horticulture at the O. A. C., who was present almost continually, was very enthusiastic about the possibilities of nut culture in Ontario. The object of the work in nuts at Guelph was, he said, to determine the limitations for the various kinds in this province and to find the species most desirable for culture. It was planned to have the most promising kinds propagated for these purposes. Mr. Neilson was anxious to get in touch with persons who are interested in the possibilities and who knew of nut trees that were bearing successfully in any part of the province. The department was introducing walnuts and chestnuts from Japan and China, also the best varieties of nuts grown in the northern part of the United States. It was planned also to carry on work in budding and grafting inferior kinds of native nut trees with superior trees of the same variety. In these ways, it was hoped to make Ontario a more beautiful and a more productive province.

FINE COLLECTION OF NUTS

In the display, there was a big collection of different kinds of native and introduced nuts. There were several types of hickories, three being of outstanding merit. Kirtland, a hybrid between the bitter nut and the shellbark, was a cultivated variety that should be hardy enough for this province. Laney, a variety that grows successfully in the parks of Rochester, N. Y., should be suitable for Southern Ontario. There was also a native variety from Norfolk County, of thin shell and excellent flavor, that appeared worthy of propagation.

In Japanese walnuts, two distinct types were shown—butternut and heart-nut, the later also of two types due to minor differences in form. One sample of the heart-nut type grew at Islington and another at Aldershot. Both were worth propagating. The Japanese walnuts, according to Mr. Neilson, were of rapid growth, early bear-

ing, heavy bearing and excellent flavor in fruit. They made very beautiful trees and appeared to be quite hardy.

In black walnuts, three cultivated varieties were shown, chiefly of Ohio. Thomas was the largest and one of the most promising. Stabler was another good one and had a one-lobed kernel. There was also a native one, not large, but thin-shelled and fine flavor. The propagated types of black walnuts bear quite early, some in their fifth year.

Four different samples of Ontario-grown English walnuts were shown, one from St. Catharines, of excellent flavor and heavy; one from Vineland Station, not quite so large but as good in kernel; one from St. David's, and one from Clarkson.

European chestnuts that grew at Jordan Harbor were in the display. American sweet chestnuts also were there. This species of nut has been grown and fruited as far east as Newcastle, and occurs west to Sarnia, and south.

A fine lot of filberts were shown, grown at Rochester. A number of these are being tried at Ridgetown, Vineland and other places. At Guelph, filberts have fruited, also at St. Williams. All in all, the nut display was very encouraging to nut enthusiasts and very interesting to spectators in general.

Black Walnut Needed

A few days ago a furniture dealer said that it was becoming harder and harder to get good walnut for furniture. It would seem to be a good investment to plant some of these walnuts. There is suitable waste land adapted to walnut growing. They make a most excellent tree around the house and often our country roads could be planted to walnuts to advantage. The nuts furnish a nutritious and attractive food and the wood is valuable. To get the best type of wood, however, the trees should be planted in groves. In a very large section of the United States some species of black walnut can be grown successfully.—American Fruit Grower.

USEFUL TREES FOR HIGHWAY PLANTING

C. A. Reed, Nut Culturist, U. S. Department of Agriculture, before Michigan Good Roads Association, Flint, Mich.

The discussion tonight will be limited largely to the nut group as the time allotted will preclude all possibility of adequately handling each of the species of both trees and shrubs which should be included under this broad heading. The nut group easily stands at the head of the list of plants now under consideration in the public mind for utility planting along the highways and in other unused places.

It is idle to parley over whether or not to plant trees along the highways. Roadside planting is here to stay and increase, despite the eloquence of those who argue, that with the burdens of the farmer already near the breaking point, he will not tolerate encroachment upon his land by roadside trees; that the product of the nut or fruit producing trees will be pilfered by city autoists, or bad boys; that such trees themselves will become public nuisances by being neglected and allowed to become breeding places for insect pests and fungi; that roadside trees are detrimental to the welfare of roads, etc., etc., ad infinitum.

Each of these arguments can at once be answered by admitting that we are perfectly aware of certain drawbacks. In fact, we regret the seriousness of some of them, yet, we repeat; that roadside planting of trees is here to stay and that it is going ahead while some of us argue. We also add that the solution to these difficulties will be found by those who plant and not by those who talk.

Granting that the planting of roadside trees has been decided upon, we maintain that for ornamental effect, size and grandeur of trees, rapidity of growth, longevity, resistance to both insect pests and destroying fungi, the nut group has representatives which are almost, if not quite the equals of any American trees. The writer himself would make an exception in the case of the American elm, which to his mind is a trifle the loveliest tree in all eastern North America. Asa Gray called it the Queen of the Forest. It has a wide range of distribution. It assumes wondrous beauty in early life and lives to a great age. Under favorable environment it develops enormous proportions. A tree on Long Island recently discovered by the College of Forestry at Syracuse, New York, had a girth diameter six feet from the ground of 31 feet. According to a New York City paper, this was the largest tree of any kind found in the state during a widely advertised contest. But, there are other kinds of trees almost as handsome as the elm, and which grow to great size and which produce a useful crop in addition to being decorative.

The New York paper which told of the giant elm stated that a black walnut also on Long Island was one of the four largest trees found during the contest. In the opinion of the writer, the black walnut is nowhere as common (as both a forest and planted tree) as in Michigan. In the southern counties, with the cities of Grand Rapids and Bay City practically marking its northern limits of frequent occurrence, it is easily one of our most handsome growers. There is no other tree in the state of as great value for timber purposes. In congenial soils it is one of the most rapid growers of any hardwood. In August 1920, while in a suburb of Boston, Massachusetts, the writer had his attention called to a black walnut tree then six feet high which had grown from a nut of the previous year's crop and which had dropped into the fertile soil of a flower bed.

The black walnut is a long-lived tree. To a considerable extent it has been used by roadsides for many years. Since the World War, it has quite properly been considerable of a favorite as a memorial tree, for which purpose it has qualifications equalled by no

other species. It has taken active part in all our American wars but in none to the extent that it did in the war with Germany. The Forest Service of the United States Department of Agriculture at Washington is authority for the statement that it was used for gunstocks by practically all of the belligerent nations. Germany in particular, bought our logs for many years beforehand. Upon our own event into the conflict, the need was suddenly so great that President Wilson issued a memorable call to the Boy Scouts of United States to find and report the situation of walnut trees of merchantable size. Probably no other American tree ever was so vitally needed by the nation as the walnut was then. Walnut shells were used by the Gas Defense in the making of carbon for gas masks and no one knows the extent to which walnut kernels were included in the delicacies sent to our boys while in France. With a record of such valiant service, it would seem that wherever the black walnut will succeed, it should be planted as a memorial tree in preference to all others. Certainly we should take the precaution to plant now as an emergency measure for future wars, and there is no better place to plant it for any purpose than along the roadways.

One of the special advantages of the black walnut is the readiness with which it adapts itself to changed environment. In Northwestern Oregon where it is not native, it has been found to make fully as satisfactory an ornamental as it does back East. In Salem, on the home grounds of a sister of Hon. Charles L. McNary, U. S. Senator from Oregon, there stands a tree which when photographed one year ago challenged any other tree in the entire country ever seen by the writer for beauty and size at its age. It was then 51 years of age and had a girth diameter at breast height of 10½ feet. In the western outskirts of Howell, Livingston County, this state, on the north side of the road and on the southwest corner of a spacious lawn, there stands a tree which, while of no great proportions illustrates the beauty and fitness of the species for either roadside, or dooryard use.

A question naturally arising in the minds of prospective planters of black walnut is when it will bear and how much will it produce. Some trees bear at early ages while others run fifteen or twenty years before setting crops. Trees of selected varieties are now being propagated which often begin producing at truly remarkably early ages. One of these varieties is in Ohio. In a nursery near Lancaster, Pa., a tree was once photographed which matured seven nuts, the next year after having been grafted. The root of this tree was not more than three years old when grafted and consequently not over four years old when its grafted top bore the seven nuts. While such early fruitfulness is not wholly of advantage as it is better for the trees to be six or seven years old from the time they are transplanted from the nursery before being allowed to fruit, it proves that the time of production is largely within the hands of the grower. Older trees are sometimes found which bear enormous crops. North and west of Hastings, a tree was once photographed when so heavily loaded with nuts that its branches bent over and broke to the ground. As there are differences in bearing habits of individual trees, so are there differences in the time of leafing out in spring, and shedding foliage in fall, and in degrees of resistance or susceptibility to insect pests and fungus diseases. Two trees in Lancaster County, Penn., were once photographed late in September when one was entirely denuded of foliage by fungus troubles and the other was still in fairly full leaf. Other walnut trees photographed at

the same time were still in abundant summer verdure. These differences of individuality in trees must be taken into consideration when selecting seed for planting if the best results are to be realized. A good rule to follow is to obtain seed from trees which in themselves possess as nearly as possible the desired qualities which it is wished to perpetuate, and from as nearly as possible the same locality.

The black walnut is far from being a stranger in public parks, private lawns or along the public highways. In a suburb of Boston, Mass., it was found in such use on a private estate, although the owner frankly admitted that in his soil, without having made special selection of seed, he felt that some other species would have been more effective as an ornamental. In California, the highway authorities are planting many miles of roadway with black walnut. In places there are already stretches of magnificent walnut trees along the roads of that state; one in particular borders the Lincoln Highway some 15 miles west of Sacramento. In Livingston County, this state, there are numerous rows of black walnut trees upwards of 50 or 60 years since being planted which are among the beauty spots of its roadway system. Unfortunately few are on the trunk lines. Some seven miles southwest of Howell to the west of what is known as the Stone School-house stands the longest avenue of black walnut trees known to the writer in the East. Taking together the trees on both sides of the road there are somewhat over 125 trees in this pleasing avenue. That the black walnut is highly prized by some of the people of Michigan at least is emphasized by the labor of one of its distinguished citizens, Hon. W. S. Linton of Saginaw. Mr. Linton, who incidentally is President of the Northern Nut Growers Association, last fall (1920) procured 30 bushels of selected walnuts from the home of George Washington at Mt. Vernon, Virginia, for distribution in his home state. These were largely planted by the school children along the roadways of Saginaw, on the school grounds and at their homes. About 2000 were planted by Mr. Linton in a nursery for subsequent use in the city parks. These young trees are making splendid growth due largely to the selection of soil by Mr. Linton and care of the trees taken by an engineer who has nothing to do with the out-door-park work but who has faithfully attended to these trees during his spare time. A considerable proportion of the trees are two feet or more in height.

Some 15 or 16 years ago, when Postmaster of Saginaw, Mr. Linton planted a walnut in the ground in front of the post office building. Today the resulting tree stands as a beautiful monument of his handiwork and thoughtfulness at the time.

A species of walnut at times much advertised in the northern states and recommended for planting is the Persian, or more commonly called "English" walnut. It is a great commercial success in portions of California where the annual production is probably somewhat above twenty million pounds. To some extent in that state it is used along the roadways with pleasing effect even in winter. However, it is capricious in its habits and east of the Rocky Mountains it is easily frozen in winter.

A NEW BOOK! NUT GROWING By Robert T. Morris

The latest and only up to date book on the newest and one of the most important branches of Horticulture, giving a broad survey of a rapidly growing industry. Detailed explanation of successful methods of propagation and the new process of grafting with the use of paraffin; illustrated.

An invaluable work for all nut growers.

Price, \$2.65, Postpaid
AMERICAN FRUITS PUB'G. COMPANY
39 State Street, Rochester, N. Y.

YOUR BUSINESS ANNOUNCEMENT

Can be kept standing in the columns of the Official Journal the year around at a cost of less than 60 cents a week! Write for particulars.

AMERICAN NUT JOURNAL, Rochester, N. Y.

The Importance and Improvement of Native Nut Trees

Native nut trees, such as the black walnut and members of the hickory group including the pecan, have a potential value not generally realized. Aside from the well-known value of the timber of the walnut in the making of furniture, gun-stocks, and aeroplane propellers, and of the white hickories in the manufacture of automobile wheels, tool handles, and many other articles, and even of pecan wood in its variety of uses, particularly for harness hames, these trees, when rightly selected and placed, form most attractive ornaments. But, in addition to these uses, which alone are of enough importance to justify the careful preservation of existing trees and the planting of others, they have an economic value in the nuts produced.

These native nuts, even though uncultivated and unimproved, and, perhaps, inferior in shell thickness and cracking quality, are preferred by many to any of the cultivated kinds from Europe and Asia.

A Nut Crop Adds to Income

On many American farms by-products or small crops make important additions to the income, and in many localities nut trees planted about the farm buildings, along the highways, or in other unoccupied spaces, or old trees that have been left in the clearing away of the original forest, are depended upon to add noticeably to the bank account. Forward-looking farmers want to make their trees produce the best nuts and in the greatest possible quantity.

First of all, every tree intended to bear nuts in quantity needs ample space, 60 feet being none too great an interval between trees of equal rate of growth, and larger trees, unless on the shady side, should be 100 feet apart. A fertile soil that is reasonably moist is best for nut trees, well-drained clay loam being the most desirable.

Variety is next in importance to soil and location. Experienced observers know that nut trees do not come true to seed, and that the only way to reproduce a variety or an identical type is by grafting or budding, as is done with apples, peaches, pears, and other fruits. Nurserymen in the northern part of the country are now propagating several varieties of black walnuts, pecans, hickories, and butternuts by these methods, but, due to the fact that active interest began only a decade ago, none of these varieties has been given much opportunity to demonstrate its usefulness as a money-crop producer. However, several varieties are promising.

Mature native trees that are well situated may be made more valuable by top-working. By "topworking" is meant the replacing of the original top with a new top of another variety. It has been practiced for a long time by fruit growers to increase the value of seedling trees and trees of inferior varieties, and owners of nut trees are now adopting the method. The steps to be taken are: (1) The selection of trees, taking into account the things just mentioned; (2) the choice of varieties to be used, and the making sure of scions or bud sticks at the proper time; (3) the cutting back of the tops during the latter part of the dormant period or very early in the spring; (4) the actual process of grafting or budding; and, (5) the subsequent care of the new growth.

Cutting Back the Tops

In cutting back the tops preparatory to budding or grafting, certain rules should be rigidly followed: (1) No cut should be

made where a limb is more than 6 inches in diameter, and a limit of 3 inches is preferred; (2) all cuts should be made so they will heal of themselves if, by chance, they receive no further attention; (3) cuts should be made in late winter while the trees are still dormant, or, at the latest, just before the leaves appear; (4) cuts should always be made slightly above a bud, which will assure renewal in case the graft should fail.

Grafting may be done by the common cleft method or the slip-bark method. The former is usually employed when the tree is still dormant and the latter at any time during the growing period, but the scions used must always be dormant, and as scions in that condition are seldom available after the first of April neither method is of much interest just now. It is now too late to top-work trees this season, but those that have been cut back and small trees that may be budded without cutting back may be left until late summer or autumn, so that scions (then called bud sticks) of the better varieties may be obtained and buds from them inserted in the bark of the new shoots.

Specially devised tools for removing the buds from the bud sticks and for removing pieces of bark of identical size from the stock are on the market. Several are illustrated in Farmers' Bulletin 700, Pecan Culture, which contains much information of interest to nut propagators, and which may be obtained by writing to the Department of Agriculture, Washington, D. C. Budding by the "patch bud" method may be done at any time when the bark of the stock slips readily. On trees of rapid growth the bark will slip at almost any time in the summer. On young trees not cut back budding may be done in the first half of the growing season, whereas new shoots grown from below cut-off tops should be of sufficient size for budding during the latter half of the season. Dry spells frequently cause the bark to tighten, but rains will loosen it later. The season for budding sometimes extends until the trees begin to go dormant. During the latter half of the season buds may be selected from those formed at the base of the present season's growth. Most of them will remain dormant until the following spring.

Robert E. Woodson, inventor and manufacturer of Woodson pecan machinery, St. Louis, Mo., will sail from New York January 22nd on a trip around the world. He will be absent six months.

Just before the holidays, in New York City, large hickory nuts sold at \$3 to \$4 per bushel of 50 pounds; common stock at \$2 to \$3. Southern black walnuts brought \$1.50 to \$2.00.

It is reported that 20 carloads of pecans were shipped from Mexico into the United States during the fall. It is said that Mexico has "seventeen varieties of pecans considered as good as any."

Botanical Gardens for Schools

Commodore Charles E. Greening, of Monroe, Mich., well-known Nurseryman, is engaged in a propaganda for beautifying school grounds throughout the state with shrubbery, plants and ornamental trees. It is a work, he says, that has been neglected, yet a work that would not only make school grounds far more attractive—and lack of attractiveness is now their chief defect—but would encourage in most profitable ways the study by school children of wooded and all ornamental growths.

"The best university of education," Commodore Greeing says, "is merely an extension of the kindergarten system. In harmony with this idea educational institutions in many places are establishing school gardens where the boys and girls become acquainted with the nature of flowers, trees, shrubs and vegetables. Some schools have gone a step farther and established botanical gardens for the study of natural science, so that within a small compass it brought together a collection of trees, and plants on the school grounds that may be studied, textbook in hand, under the teacher's direction.

"This method gives a far more intimate acquaintance with trees and plants than the old way of memorizing their names. At a limited number of schools still another step farther has been taken by pupils laying out the school grounds with the aid of textbooks and a landscape architect, in this way securing the double purpose of beautification and nature study.

The Pecan as a Street Tree

By O. K. Darden, Oklahoma

There was some excuse thirty years ago for people planting hackberry and elm trees. They were easy to make live and easy to obtain and the commercial value of the pecan tree had not been established in this country and it was not considered as it is today a better shade tree than the hackberry. Hackberries and elms are surface coated trees. Their roots spread far and wide and they sap the soil of all moisture and fertility and ruin many gardens and much field land while the pecan is a tap rooted tree and interferes but little with growing crops right under it. It may be all right to plant hackberry, elm, locust and maple trees if we didn't know of anything better, but we know better and if we don't do better we are retarding progress and committing a crime against posterity by not having something of material worth to hand down.

Dallas is to put out 5,000 shade trees this winter consisting of oak, hackberry, elm and cottonwood. I would like to see some of the great pecan trees of Texas go before that bunch of city dads with all the argument in favor of the pecan and of the error of their way.

Marietta made the mistake of planting umbrella china trees on her court yard. They are nice shade trees when they are at home but their home is a thousand miles south of Marietta and they will not stand this climate. Oklahoma City made the mistake of planting maple, locust and hackberry trees on her court yard. Ardmore the mistake of leaving her court yard bare and I am going to insist that it be covered with the best varieties of pecan trees and when they reach a bearing age it will be the grandest sight in Oklahoma.

Just mention AMERICAN NUT JOURNAL.

List Your Wants And Offerings In
THE OFFICIAL JOURNAL

Every Month To Every State In The Union

AMERICAN NUT JOURNAL
ROCHESTER, NEW YORK

The American Nut Trade: Market and Crop Reports

A Great Pecan Exhibit

Through the joint efforts of pecan growers of San Saba county, Texas, under the leadership of Secretary J. E. Bell, secretary of the San Saba Chamber of Commerce and A. W. Woodruff, secretary of the San Saba Pecan Company, what officials of the A. and M. College declare is the greatest collection of pecans both in point of quality and number of varieties ever gathered in the world was exhibited at the annual horticultural show held at College Station, Tex., by the college in the middle of December.

The Houston Chronicle, Dec. 24th, said:

There were more than 120 varieties in the collection, all of which were grown in San Saba County and 90 per cent of which are native, that is uncultivated and unirrigated. The other 10 per cent were grown in the county from stock imported from other counties. Among the collection is one native pecan whose smallest circumference is 3½ inches. Thirty-five of the nuts weigh one pound. Retailing at 60 cents a pound, they cost about 2 cents each.

To assemble the many different specimens the San Saba Chamber of Commerce offered a number of prizes on size, quality and utility. The collection has been left at the college to be judged by Dean E. J. Kyle of the school of agriculture and on his placing the prizes will be awarded.

An educational aspect was given to the display by a second exhibit to show that pecans will not produce true to seed. Forty kinds of widely different sizes and shape and as variable in quality and all from trees grown from seed of a single tree were shown. It graphically illustrates the fact that grafting or top-working is essential to secure uniformity of production.

Bell intends to have the exhibit on display at the state fair next year and at other fairs during the following year.

La Cygne, Kan., Jan. 3—Local buyers of pecans paid out upward of \$20,000 for nuts this season. The prevailing price has been 17 cents a pound, with big nuts bringing 20 cents. Arthur Priser reports having gathered more than 200 pounds from one tree, worth on the market at wholesale more than \$35. Jim Shelton, who had the job of gathering the crop on the Sweet land south of town, at 5 cents a pound, harvested more than 3,000 pounds. In one day he gathered 163 pounds, earning \$8.15, and he earned more than \$5 every day he worked at the job. Hickory and walnut trees also produced good crops last year and added many dollars to the income of the owners.

To Plant Pecan Trees In California

Calexico, Cal., Jan. 10—Two carloads of pecan trees are expected here soon for planting on the ranches of W. J. Hartman, A. M. Shenk and Lloyd Ayers. The shipment is to be used to make a thorough test in the valley, as experts have declared the soil and climate to be especially suitable. Growing pecans on land under which the water table is near the surface is declared to have been successful, as the roots require plenty of moisture. The land on which the trees will be planted by Shenk is near New river,

where the soil has been found less suitable to other crops. Calexico is on the Mexican frontier, as its name implies, near Yuma.

Progress of Pecan Culture

Referring to the selection of a site in Georgia for a pecan experiment station, the Atlanta Journal in a leading editorial says:

"Remarkable as has been the growth of this branch of orcharding in the last decade or so, its development in the years ahead gives promise of results far richer. Already it pours a large and steady stream into the state's prosperity. Between the year 1908 and 1918 it increased from an output of about one hundred and thirty thousand pounds to approximately three million. In the former year there were fewer than five thousand bearing trees in the entire Commonwealth; today that number stands multiplied many times and new groves are continually planted. Moreover, the science and art of pecan culture have grown apace so that there are now fifty approved varieties of the trees and clearly established principles for making them profitable. Able observers believe, however, that merely the beginning of the industry has yet been witnessed. Because of its incomparable flavor and food value, the pecan is ever gaining in popularity both in America and in Europe. There is no likelihood, for many a decade to come, of the supply exceeding the demand.

"Hence the keen and wide reaching interest in the forthcoming experiments under direction of scientists from the government bureau of plant industry. Tests will be made in grafting, in propagation, in the development of new varieties, in combating diseases and parasites, and in evolving a tree which, as some specialists believe, can be brought to bear within four years. A rare and valuable distinction it is to Georgia to be the center of this important work."

N. S. Hopkins, now of Worton, Kent Co., Maryland, still maintains his plantings of pecans and walnuts in Gloucester Co., Virginia. The grafted black walnuts in four years from planting as one year grafts have borne two crops. The varieties are Stabler, McCoy, Kinder, Thomas and Miller. The Ohio and two other varieties have not yet borne nuts.

La Cygne, Kan., Jan. 8—J. J. Fritz says: "One pecan tree in my chicken yard paid the taxes on my home this year." Mr. Fritz has one of the best kept up homes in the community and the taxes on it amounted to a neat sum.

Green, Wood & Co. and R. J. Rogers, Skiatook, Okla., paid \$18,000 to pecan gatherers for nuts last fall. Four carloads were shipped.

The 1922 pecan crop in Oklahoma reached only 425,000 pounds, as against 2,221,000 pounds in 1921.

If it relates to nut culture it should be in the AMERICAN NUT JOURNAL. Please send it in.

The Texas Pecan Station

Regarding the protest, in the form of resolutions, by pecan growers of Texas, at a meeting in Brownwood, Tex., early last month against the proposed removal of the pecan experiment station from Brownwood to Georgia, as reported in the last issue of the Journal, the San Saba, Tex., News said:

Announcement was made from the Department of Agriculture at Washington last week that the station of pecan entomology located at Brownwood was to be moved to Thomasville, Georgia, and Mr. A. I. Fabis, in charge of the station was ordered to pack his office equipment and proceed to the latter place. At once the Chamber of Commerce at Brownwood got busy, the Chamber of Commerce at San Saba joined and a hearing was granted. Mr. John B. Gill of the department was sent and a hearing was first held in Brownwood last month. J. E. Bell, secretary of the local Chamber, A. W. Woodruff, chairman of the pecan committee of the Chamber, E. H. Norris, S. F. Clark, county agent, W. D. Cowan, Warner Moore, E. L. Rector and Howard Moore all attended. Mr. Woodruff is secretary of the San Saba Pecan Company and was the leader of the delegation. He was made chairman of the resolutions committee and presented a set of strong resolutions setting forth many unanswerable reasons why the work should be continued in this section by the department.

The Brownwood Bulletin reporting the meeting had this kind remark for Mr. Woodruff, who was the leading speaker before the convention. "Mr. Woodruff is a real live wire on the subject of pecans and the people of San Saba are fortunate in having a man of his ability and hustling qualities as one of her citizens. He has a way of saying things that goes straight to the spot and carries convictions."

At the San Saba meeting a large number of actual pecan growers were present, including W. J. Millican, J. N. Alexander, and W. H. Gage, Bend; E. H. Norris, T. Y. Elton, and others of the valley. J. E. Bell called the meeting to order and asked Mr. Woodruff to preside. Most of those present were called on to discuss the situation and Mr. Gill frankly said the real pecan men of the San Saba valley had shown more interest than anywhere he had been. Mr. Gill was accompanied from Brownwood here by Messrs. Ramey, pecan dealer, and Mr. Fabis, the government man.

No information was given out by Mr. Gill but he assured the pecan men that he was favorably impressed with the interest of the people of this section of Texas in the development of improved pecans, and it is expected that he will make a favorable report to the department on the resources, the possibilities and the growing interest of the Texas people. He was certainly impressed with the fact that San Saba is in the very center of the biggest pecan growing belt of the United States.

West Point, Ga., Jan. 5.—The pecan groves around West Point report good crops this year. Several tons have been shipped from the Reid pecan grove and others report good sales.

Just mention AMERICAN NUT JOURNAL.

Greatest opportunity for large and prompt profits in nut-trees. Unlimited future. Rare chance for a few live investors. Address B. A. care this Journal.

HARDY POMEROY ENGLISH WALNUT TREES

Write for Prices of Trees and Further Information

Visitors Always Welcome
LOCKPORT, N. Y.

ALBERT C. POMEROY
POMEROY ENGLISH WALNUT FARMS

PECANS

IN SMALL QUANTITIES

For Use at Your Home or Office.

"Instead of a box of cigars, or candy, for a gift, why not a box of Pecans? The novelty of the present will make it doubly acceptable." Good for children—good for grown-ups. Georgia-grown, paper-shell varieties, Per Pound \$1.00, by mail postpaid.

Any quantity from 2 pounds up. Cash with order

ARTHUR R. TUCKER
P. O. Box 365, Rochester, N. Y.

THE ALMOND

The California Almond Growers Exchange has inaugurated a Production Department which began functioning January 1, 1923. This department, in charge of Mr. R. H. Taylor, formerly with the Division of Pomology in the College of Agriculture for seven years and who during that time was charged with investigational and teaching work in nut culture and who more recently has been in Washington, D. C. on almond tariff matters, will be charged with the responsibility and opportunity of doing everything possible to assist the growers of almonds to produce almonds of better quality, more economically than they have ever been able to do before. It is the aim of the organization to do everything possible to keep the price of almonds to the consumer as low as possible and yet at the same time insure the grower as great a return as he should legitimately expect on what he produces.

It is hoped that this department will be able to find many ways in which the grower can reduce his costs of operation without reducing his yield, and also that in many cases we may be able without increased expense but by better distribution of costs in more effective operations, enable the grower to materially increase his yield. Either case will result in a reduced cost of production and enable the grower to realize a profit and at the same time enable the organization to place the almonds into the hands of the consumer at a lesser price.

Mr. Taylor's former connection with the College of Agriculture in the University of California and also as assistant to the State Director of Agriculture should enable him to secure the fullest co-operation on the part of state agencies in accomplishing the most for the grower. His added acquaintance in the United States Department of Agriculture should help materially in co-operating with them with the same end in view. It is earnestly hoped that in co-operation with the office of Horticultural and Pomological Investigations of the United States Department of Agriculture and the College of Agriculture that some extensive and much needed work can be done along

NEW MEXICO PINONS or INDIAN NUTS

We have an excellent grade of Pinon or Indian Nuts. Can make shipments in carlots and less. Interested parties write or wire

Gormley's General Store
Santa Fe, New Mexico

the line of breeding new varieties of almonds which may prove more satisfactory for both producer and consumer.

Almond Bleaching Machine

The California Almond Growers Exchange recently took advantage of a thirty days' option on the invention of an almond bleaching device, and purchased it outright from the joint inventors, Albert M. Fowler and William H. Caulfield. As formerly bleached, the nuts were placed on large wooden trays, trucked by hand into sulphur boxes holding fifteen trays, and kept there until the fumes of the smoldering sulphur beneath them had bleached the shells. With the new device, the almonds are emptied from the sacks in which the grower delivers them, into a receiving hopper, carried from the bottom on a delivery belt to the front end of the bleaching chamber. From the delivery belt, they pass to a continuous belt, 200 feet long, and sixteen inches wide, which carries them first into a steam box where they are sprayed with steam, then into a sulphur chamber, built of concrete, forty feet long, four feet wide, and seven feet high. As they reach the farther end of the sulphur chamber, the nuts are thrown off the belt by two spreaders, and fall on the reverse side of the same belt, carried to the front of the chamber, again thrown off and the operation repeated until five journeys the length of the chamber have been made. The nuts are two inches deep on the belt, and are in the sulphur chamber about twenty minutes. From this receptacle they are carried into the sacking bin, the lower end of which automatically opens, and closes as a sack placed beneath it is filled. From the time the almonds enter the receiving hopper until they are placed into the shipping sacks they are not touched by hand.

Dr. J. H. Kellogg, head of the Battle Creek, Mich., Sanitarium, and an active member of the Northern Nut Growers Association, contemplates the planting of a ten-acre nut orchard. Such a project, cared for as Dr. Kellogg does things, would be a fine demonstration of Nut Culture under the eyes of the many persons who visit the sanitarium from all over the country.

Just mention AMERICAN NUT JOURNAL.

MEMBERSHIP DRIVE

National Pecan Growers Association
The National Pecan Growers Association fee for membership is \$2.00 per year, with a student membership fee of \$1.00.

The subscription price for the American Nut Journal, official organ, is \$2.00 per year.

Note combination offer below.

REGULAR YEARLY RATES
Association Membership.....\$2.00
American Nut Journal..... 2.00

SPECIAL YEARLY RATES
Association Membership } \$3.25
American Nut Journal }

Address J. Lloyd Abbot, Sec'y.
Route 1, Spring Hill, Ala.

BLACK WALNUT

Black Walnuts for Colorado

This is the season of the year to plant black walnut groves. The black walnut is the most valuable wood that can be grown on Colorado farms. The trees grow fairly rapidly. Much more rapidly than most trees, except willows, poplars, etc.

Black walnuts are hardy and easily raised. In a few years they begin bearing walnuts and it does not take much of a grove to bring a fairly good income from the sale of nuts. The demand appears to be unlimited at prices ranging from five to ten cents a pound.

To plant out a grove put the nuts in the ground any time in the early part of the winter. Plant them in rows just where you want them to grow. Plant the nuts three or four inches deep and for the first year or two the rows can be cultivated like corn.

The nuts must not be planted so late in the winter so that they will not freeze. Black walnuts are on sale in nearly all the groceries at from seven to ten cents a pound. There is scarcely a farm but has waste land along ditch banks and in fence corners where black walnuts could be profitably raised. The trees make excellent fence posts and when large enough for saw lumber the logs bring big prices. Walnuts do well in this vicinity and every farm would be more valuable if it had a walnut grove. The trees are nice looking and make good shade. Plant walnuts this winter.—Fort Collins, Colo., Express.

President James S. McGlennon, of the Georgia Pecan Growers, general agent of the Georgia Paper Shell Pecan Company, originator of the McGlennon-Vollertsen Improved European Filbert Nursery, broker of the National Pecan Growers Exchange and president of the Northern Nut Growers Association, made a fine exhibit of Georgia-grown commercial pecans and New York-grown filberts in the Main street window of the Rochester, N. Y., Herald early last month. It attracted much attention and was a graphic portrayal of what is being done in the Nut Industry, North and South. Sample lots of filberts from the New York State Nursery and proving grounds were sent to Mayor Clarence D. Van Zandt, President James E. Gleason of the Rochester Chamber of Commerce and others and elicited hearty expressions of appreciation.

The planting of 5,000 fig trees at Robstown, Tex., is planned.

BUDDED AND GRAFTED

PECANS

Sturdy and prolific Stuart, Schley and Success trees, carefully selected and scientifically grown. Best varieties for shade, ornament and profit; thrive almost anywhere. All trees carefully dug from nursery, and specially packed for safe shipment.

Write us for prices and any desired information.

Harlan Farms Nursery
PECAN SPECIALISTS
LOCKHART, ALABAMA

The Logical Market Place for Sale of Nuts

The Advertising Columns of the *American Nut Journal* Chief Exponent of the Trade.

Hundreds of Readers of this Journal Ask for Pecan Nuts in Moderate Quantity at Prices Less Than the Retail Price per Pound in Northern Markets. They Would Be Eager Buyers if They Knew Where to Apply. If There is Any Surplus at Any Time, the Advertising Columns of this

Journal Will Dispose of It. Rate, \$2.80 per Inch. Announcement Should be Maintained the Year Around (Yearly Rate, less than 60 Cents per Inch a Week) to Secure Best Results. Make Your Name a Household Word Wherever Pecans Are Wanted. Make It Easy To Procure Them.

AMERICAN NUT JOURNAL

P. O. Box 124

ROCHESTER, N. Y.

THE BUTTERNUT

Why Butternut Trees Are Dying Out

For many years botanists and foresters have noticed the gradual decline of the butternut trees in this region. Dr. Robert T. Morris, New York surgeon, who is particularly interested in nut trees and nut growing, writes as follows:

"Over the greater part of Connecticut when I was a boy we had magnificent butternut trees and on my country place at Stamford the last one of the majestic ones is now dead. Most of the younger generation died before they were thirty years of age, many of them at fifteen or twenty years."

For the past four years, Dr. Arthur Ham-mount Graves, curator of public instruction at the Brooklyn Botanic Garden, has been investigating this trouble, and the work is now being brought to a conclusion. Dr. Graves finds that although other causes may be contributory such as extremely cold winters and excessive droughts, the chief agency responsible for the trouble is a fungus (*Melanconium oblongum*).

That this fungus is a slow parasite in the bark and wood of the butternut has been established as a result of experiments on healthy seedlings presented to the Garden for this purpose by Willard Bixby, nut culturist of Baldwin, L. I. Seedlings of butternut, of Japanese walnut, a closely related species, and of the black walnut all became affected with the disease when inoculated with the fungus in question. The relative susceptibility of the black walnut has not yet been studied carefully, although present indications point to its comparative freedom from the trouble.

FUNGUS KILLS THE TWIGS

After the fungus enters the twigs it gradually kills them, and travels slowly down to the main branch where it may go up or down in the wood to kill other twigs. Eventually the parasite may thus reach the trunk. Affected trees become stag headed or show many dead limbs here and there. These when first detected should be immediately cut off nearly flush with the trunk and the wound painted over to prevent further progress of the fungus and also to exclude spores.

Diseased branches may be recognized by the fruiting pustules of the fungus, which appear as small, black pimply projections, the black color being imparted by the thousands of very dark olive green spores they

contain. In wet weather these spore pustules appear like drops of ink on the branch or twig.

VALUABLE AS GRAFTING STOCK

Although the butternut is of only minor importance as a forest tree, its wood, softer and of a lighter color than that of the closely related black walnut, has been used in cabinet making and takes a handsome, satiny polish. On account of its nuts, the tree is fraught with youthful associations, and its bark has been used as an effective medicinal remedy by some of the country folk, as well as for a dye for homespun cloth.

One of the most important uses is in connection with the splendid work being carried on by nut culturists at the present time in the way of breeding new varieties of nuts. Here it is used as a stock on which to graft desirable varieties and is also of value for cross-breeding purposes.—New York Evening Post.

Shipments of Poor Nuts Condemned

A despatch from Cincinnati, O., says that Dr. R. B. Blume, chief food inspector of the Board of Health, condemned 4700 pounds of English walnuts, part of the Christmas shipments arriving in Cincinnati. He also ordered the reshipping of two 15,000 pound carloads of nuts, 60 per cent of which, he said, were rotten.

"We try to inspect everything that comes in," Dr. Blume said. "Of course, the nuts give the most trouble. Anybody can tell a bad orange or grape, but a bad nut looks just like a good one until you open it."

"We take samples of all shipments, and if the product is not satisfactory we order it reshipped or condemned. If it is still in the cars we have it sent back; if it has been unloaded we destroy it."

"A total of 4700 pounds condemned is about the daily average. On the whole, the nuts are arriving in better condition than in former years."

1900 Tons at 22½c. a Pound

Walnut groves at Orange county, California, had a very satisfactory season, selling 1900 tons of walnuts at the peak market price of 22½ cents a pound for number one grade within 48 hours after the price was set.

Hickory and pecan nuts to the value of \$12,000 were shipped from Edgerton, Mo., one week in the fall and to the value of \$10,000 the following week, according to a despatch.

THE PINON NUT

The possibilities in the use of pinon-nuts for dainty confections were shown in the novel packages sent out during the recent holiday season to her friends by Mrs. Fannie S. Spitz, of Albuquerque, N. M., the inventor and sole manufacturer of the F. S. S. Sunshine nut shelling and separating machine. The diminutive, delicately-flavored pinon-nut is the embodiment of daintiness in itself. In her appreciative and skillful hands a wide variety of uses of this nut in most tempting ways is shown.

Mrs. Spitz has doubled the capacity of her machines; this emphasizes the efficiency of her practical inventions. The value of her experience with and knowledge of the shelled-nut industry has set a precedent in the manufacturing of nut-meats which is recognized everywhere as an important step forward.

Her careful methods of intelligent production and distribution of the shelled pinon-nut (knowledge acquired through years of study and persistent application to the work) have given the stamp of quality to her merchandise, which none can gainsay. It is both out of regard for her patrons as well as for the protection of the industry, that Mrs. Spitz promotes her superior service methods, which uphold the standards upon which she feels her successful operations have been based.

The story of her endeavors has carried from here to the Hawaiian Islands and to the far Australian coast and if fame is the "recognition of service" she has had her full share, as evidenced from the press commendations and letters from all points of the globe.

Mrs. Spitz punctuates her remarks with the following: "I have not built my industry on the 'shifting sands of price,' rather on the firm foundation of the production of goods of high character, like the standardized quality of my packages and the unimpeached methods which I have steadfastly employed in the production of a delicate foot item. My 'Personal Service Packages' tell the story clearly and invitingly, and the 'Sunshine Nut,' is a recognized factor—come to stay."

Throughout the state of Georgia, last fall, black walnuts were offered at \$1.50 per bushel; hickory nuts at 70c.

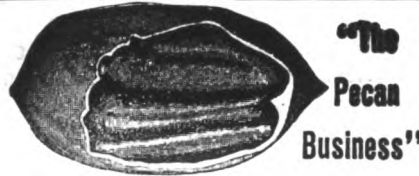
Budded and Grafted
HARDY NORTHERN NUT TREES
Best varieties, grown in natural nut soil. Send for catalog. Have your seedling nut trees topworked to these fine varieties.
Information and estimate on request.
INDIANA NUT NURSERY
Rockport. J. F. Wilkinson, Prop. Indiana

PECAN TREES

100,000 TREES—STANDARD VARIETIES
WE GROW NOTHING BUT PECAN TREES
HIGH QUALITY—SERVICE THE BEST
SIMPSON NURSERY CO., MONTICELLO, FLA

THIS SPACE
\$2.50 Per Month Under yearly Contract
Under less than yearly term:
\$2.80 Per Month

PECANS
We are the pioneer growers of budded and grafted pecans in the South. Have a complete stock of the leading standard varieties. Can furnish trees we know will please and give satisfactory results. Catalog free.
INTERSTATE NURSERIES
C. M. Griffing & Co. Props., Jacksonville, Fla.



NEW EDITION FREE
A practical guide showing how to bud pecans. Tells how to grow trees 12 inches in diameter by the end of the 8th year, which yielded 400 lbs. nuts per acre.
Trees, Nuts, Groves for sale direct without agent at attractive reduced prices
B. W. STONE, Thomasville, Ga.

PECAN TREES
We Grow Them Right
We Pack Them Tight
We Price Them Right
Southern Nut Tree Nurseries,
THOMASVILLE, GA.

SUCCESS
and other leading varieties. Also citrus
BECHTEL PECAN NURSERIES
Ocean Springs, Miss.

PECAN TREES
Plant them this year! Buy direct from nursery and save agent's profit. All standard varieties; quality and service the best. Write us for prices.
FLORIDA NURSERIES
W. W. Bassett, Prop., Monticello, Fla.

AMERICAN NUT JOURNAL CHIEF EXPONENT OF AMERICAN NUT INDUSTRY

Of National Circulation

Covering Every Phase of Nut Culture

Subscription: - - \$2.00 Per Year
Advertising: - - \$2.80 Per Inch

Official Journal { National Pecan Growers Association
Northern Nut Growers Association

AMERICAN FRUITS PUBLISHING COMPANY

39 State Street, Rochester, N. Y.

Almonds Possibilities

(Continued from page 2)

volves the development of a long-time plan which must be consistently followed. We would not look for any results to speak of before ten years, and would not expect any definite worthwhile results short of twenty years. It appears, however, that the possibilities are great and well worth striving for, and it is our sincere hope that some day a variety may be developed which will prove adaptable to eastern conditions.

The usual summer climatic conditions which prevail in the eastern states are not favorable to the economical production of almonds in a commercial way but we see no reason why they should not be eventually developed to the point where they may prove of considerable value and satisfaction for home orchards. The very fact that thus far no varieties of peaches have been developed which are immune year after year to spring frosts would indicate that it would probably be impossible to secure an almond which would be better than any peaches now known. On the other hand, one never knows until he tries and we believe that out of the effort much good could be accomplished, not only in the possible production of satisfactory varieties of almonds, but possibly in the accidental development of new and highly desirable peach varieties.

The possible development of a desirable table or canning peach variety with a sweet kernel would in itself be well worth the effort.

Pecan Hunting

If the city dweller were to get into his car and drive out into the country with the announced intention of "hunting" hogs or stillson wrenches or spare tires, he would soon find himself pursued by a representative of the sheriff's force. And when a colored brother "hunts" a fat hen by the dark of the moon it is stealing. But when the town man takes pecans that belong to some farmer it's "hunting." The farmer, however, can't see why it isn't stealing, even if it is a hundred pounds of pecans or so that he loses, instead of a hog or a coop of chickens. And when you come to think of it, there doesn't seem to be much moral difference after all.

The trouble is that few people stop to think of it. It seems so small a matter to turn out by the side of the road and strip a pecan tree of its yield, throwing chunks and sticks up into the branches to knock the nuts loose—at the same time injuring the tree so that there will be little or no crop the next year very probably. The practice is a relic of old times, when persimmons, nut trees of all kinds and watermelons were considered pretty much common property. "Hunting" watermelons, indeed, has always been put down as a mild form of stealing, perhaps owing to the fact that the labor of planting and tending the patch was recognized as conveying to the owner some of the color of ownership which is associated with other property. But the fruit of trees and plants which grow without cultivation or deliberate planting by the owner has long been looked upon as "wild" and hence as no man's, although found on land clearly forbidden to the public generally.

Pecans, however, are no longer in the class with hackberries, sheep sorrel and red haws. Pecans are a salable crop. Just at this time they form a far more salable crop than corn or wheat. The fact that a pecan tree is of natural growth instead of carelessly planted and grafted nursery stock doesn't rob the owner of the right to the crop and to the protection of his trees against promiscuous felling and mutilation by trespassers and thieves. His pecan tree is just as much his as his corncrib or his horse stall. Town people ought to realize this; and if they don't, nobody can blame the farmer for calling on the criminal courts for redress.—Galveston, Tex., News.

Just mention AMERICAN NUT JOURNAL.

THE NORTHERN NUT GROWERS' ASSOCIATION

THIS Association comprises among its members those most skilled in the propagation of nut trees and those most advanced in nut growing. It also comprises among its members many who are not experts, and who become members for the purpose of learning. It welcomes to membership both the expert and the learner. It is not organized for profit, its aim being the acquisition and dissemination of knowledge of nut trees and nut growing. A number of its members have expended much time and considerable money in experimental work, and have given the results to the Association. This work is still going on.

The proper use of nuts is not generally understood. They are usually used as a delicacy, whereas they are a most concentrated food. Careful experiments have shown that they will successfully replace meat in the diet even of such animals as wolves and tigers. The food value of nuts from an acre of ground is many times that of the beef that can be produced on the same ground, and nut growing seems destined to solve the problem of the diminishing supply of meat and the increasing demand for it. Probably the most practical use of nuts is to partially replace meat rather than to replace it altogether.

In Europe, land with bearing nut trees on it brings a higher rental than the best cultivated land, and the same will be true in America when the value of nut tree crops is more generally recognized. In certain sections of the South, pecan trees bearing fine nuts have enormously enhanced the value of the land on which they stand, and it is only a question of a few years when this will be true in other sections of the country. It will be so when the orchards of nut trees, now being planted, begin to bear. It is confidently believed by the Association that nothing can be grown which will give as great returns, for the labor expended on them, as bearing nut trees.

Nut trees will not come true from seed any more than fruit trees will. A fine nut, when planted, will almost certainly cause a tree to grow which will bear very inferior nuts, but this same tree will bear fine nuts if it is grafted or budded with scions or buds from a tree bearing fine nuts. While fruit trees have been successfully grafted and budded for many years, it is only within a few years that it was possible to do this with nut trees. This can now be done quite successfully, however, and the methods of doing it are being steadily improved. Young trees, grafted or budded to the fine varieties of nuts that have been discovered can now be procured from a few nurserymen making a specialty of growing them. The Association has a list of such nurserymen which will be mailed free on request.

While fine varieties of northern pecans, hickories, black walnuts, etc., have been discovered and are being propagated, it is doubtless true that all the fine nut trees in the country have not come to the attention of the Association and hence it is seeking each fall to learn of other meritorious nuts, and, to further this, prizes have been offered for northern pecans, hickories, black walnuts, butternuts, hazels, English walnuts and Japan walnuts.

It is perhaps well to state here that nut growing, being the newest branch of agriculture, at least in America, is one about which everything is not known; and the best varieties of each particular kind of nut for each section is something that has not been definitely worked out. It is being done, however, and progress in growing nut bearing trees and shrubs is so rapid that a person whose knowledge is two or three years back is behind the times. This is in marked contrast with other branches of agriculture where good cultural methods and varieties were worked out years ago. In the matter of nut growing almost the only way to get the latest information is by reading the American Nut Journal and through the Secretary's office. There is no place where up-to-date information on nut growing is to be found as it is in the Secretary's office, and his services are free to members.

Even though the facts require it to be stated that our detailed knowledge of nut growing is not as comprehensive as that on most other agricultural subjects, yet it must not be understood that it is not sufficient so that planting nut trees must be regarded as so difficult that few can succeed. Anyone, who plants the right kind of nut trees, in good soil, and gives them proper attention till they become established will have something that will not only be a source of pleasure but a source of constantly increasing income. The English walnut, hazel and almond orchards of Europe and California and the pecan orchards of Southern United States have amply demonstrated this for these sections, and the nut trees planted in the north which are just coming into bearing have convinced careful observers that the fine nut trees in the north will do likewise. Therefore the Association wishes to emphasize that the important thing to do now is to PLANT THE FINE VARIETIES OF NUT TREES THAT WE NOW HAVE.

Membership in the Northern Nut Growers' Association is as noted below:
 Membership for one year, including copy of Current Report.....\$2.00
 Membership for one year, including copy of the Current Report and subscription to the American Nut Journal for one year, if sent to an address in the United States 3.25
 Membership for one year, including copy of the Current Report and subscription to the American Nut Journal for one year, if sent to an address in Canada or abroad 3.75
 Contributing Membership and Subscription to Journal, one year..... 5.00
 The Current Report is the 12th. Copies of the 2d, 3d, 4th, 5th, 6th, 7th and 8th can be supplied at 50c each to members, or \$1.00 each to non-members.

The American Nut Journal is the only paper devoted exclusively to nuts and nut growing. Subscription to it, without membership in the Association, is \$2.00 per year or \$2.50 if sent to Canada or abroad.

WILLARD G. BIXBY, Treasurer, 32 Grand Ave., Baldwin, Nassau Co., N. Y.

Greek Dealer Praises American Nuts

A Greek wholesale dealer in nuts in New York city recently said: "The United States has made more progress in nut culture in 10 years than Mediterranean peoples have made in 10 centuries. Without doubt this country is now producing the finest pecans and almonds and English walnuts in the market today. I would be interested to claim first place for the imported ones if it could be honestly done, but it can not be claimed by any impartial judge.

"Look at these!" He held out a handful of large pecans.

"Nuts like these, I think, were never grown on the earth before. They astonish

me, even. Five states now are producing a commercial crop—Texas, Alabama, Mississippi, Georgia and Florida. Scientific knowledge of tree culture and endless care and patience, both in the growing and in the grading and packing. That is what does it. "California almonds are much the best. The uniformly large kernel and thin shell are not available in either the Spanish or the Asia Minor almond crop. The same is true of English walnuts."

Dr. Robert T. Morris had an article on nut growing in the October 1922 issue of the Garden magazine and another in the January Bookman. The latter is on the literature of quackery.

American Fruits Company's Library Opportunities

PRACTICAL BOOKS ON HORTICULTURE, NUT GROWING, NURSERY PRACTICE

Any of the following books will be sent on receipt of price by AMERICAN FRUITS PUB'G CO.,
123-125 Ellwanger & Barry Bldg., ROCHESTER, N. Y. Prices subject to change.

American Apple Orchard By F. A. Waugh.....	\$1.90	Insect Book—Dr. L. O. Howard.....	6.30	Parsons on the Rose—Parsons.....	1.75
American Fruit Culturist By John J. Thomas.....	3.65	Insects and Insecticides—Weed.....	2.15	Peach Culture—J. A. Fulton.....	1.65
American Fruit Farm—F. N. Thorpe.....	2.65	Insect Pests of Farm, Orchard and Garden—Sanderson and Peairs..	4.65	Peach Growing—By H. P. Gould....	2.65
American Grape Culture—Munson..	2.65	Irrigation Farming—L. M. Wilcox...	2.40	Pear Culture for Profit—Quinn.....	1.35
American Grape Growing and Wine Making—George Husmann.....	2.15	Irrigation for the Orchard—Stewart	1.75	Picturesque Gardens—Henderson....	2.25
American Horticultural Manual By Budd-Hansen, two vols....	3.30	Land Drainage—Joseph H. Jeffrey..	2.15	Plant Breeding—By Dr. L. H. Bailey	3.40
American Peach Orchard—Waugh..	1.90	Landscape Gardening—Art of Land- scape Architecture—Parsons....	3.65	Plant Propagation; Greenhouse and Nursery Practice—M. G. Kains..	2.40
Bulbs and Tuberous-Rooted Plants..	2.15	Landscape Gardening—Downing's Famous Work—10th Edition— Revised by Waugh.....	6.00	Plant Physiology—B. M. Duggar....	3.00
Bush Fruits—By F. W. Card.....	3.15	Landscape Gardening—House and Garden's Book of Gardens, 9 1/2 x 12 1/2, 400 Illustrations.....	5.15	Pomology, Text-book of—Gourley...	2.75
California Fruits and How to Grow Them—E. J. Wickson, A. M....	4.15	Landscape Gardening—Kemp—Re- vised by F. A. Waugh.....	2.15	Practical Forestry—A. S. Fuller....	2.15
Citrus Fruits—J. E. Colt.....	3.40	Landscape Gardening—Maynard....	2.65	Practical Fruit Grower—Maynard...	1.00
Commercial Apple Industry of North America.....	3.65	Landscape Gardening—The Small Place—By Elsa Rehmann.....	3.65	Principles of Agriculture—Bailey...	2.00
Cyclopedia of Hardy Fruits By U. P. Hedrick.....	6.20	Landscape Planting, Plants for....	.85	Productive Orchard—F. C. Sears.	2.65
Dwarf Fruit Trees—Waugh.....	1.00	Landscape Gardening—Cridland....	2.65	Principles of Fruit Growing—Bailey	2.65
Farm Bureau Movement—O. M. Kille	2.15	Landscape Gardening—The Com- plete Garden—Albert D. Taylor.	6.15	Principles of Pruning—Kains.....	2.65
Fertilizers and Crops By Dr. L. L. Van Slyke.....	3.40	Landscape Gardening—O. C. Simonds	6.15	Pruning Manual—By L. H. Bailey...	2.65
Fertilizers—Edward B. Voorhees...	2.65	Manual American Grape Growing— Hedrick.....	3.40	Putnam's Garden Hand Book.....	2.00
Field Notes on Apple Culture By Dr. L. H. Bailey.....	.90	Making Horticulture Pay—Kains....	1.90	Quince Culture—W. W. Meech.....	1.35
First Principles of Soil Fertility By Alfred Vivian.....	1.50	Manual of Fruit Diseases—L. R. Hessler, H. H. Whetzel.....	3.15	Roses—How to Grow—Robert Pyle.	1.35
Fruit Growing in Arid Regions.....	2.75	Manual of Fruit Insects—M. V. Slingerland, C. R. Crosby.....	3.90	Rose—H. B. Ellwanger.....	1.40
Fruit Garden—P. Barry.....	2.40	Manual of Gardening—L. H. Bailey..	3.40	Sales Promotion By Mail.....	2.15
Fruit Harvesting, Marketing—Waugh	1.90	Manual of Tree Diseases—Rankin...	3.40	Small Fruit Culturist—A. S. Fuller..	1.75
Fruit Insects—Crosby.....	3.90	Manual of Vegetable Garden Insects By Crosby & Leonard.....	2.90	Soils—E. W. Hilgard.....	4.25
Fumigation Methods.....	1.90	Manures and Fertilizers—Wheeler..	2.65	Soils—Lyon-Fippin-Buckman.....	3.40
Gardening for Pleasure—Henderson.	2.15	Modern Fruit Marketing—Brown....	1.90	Soils—F. H. King.....	2.40
Gardening for Profit—Henderson....	2.15	Modern Propagation Tree Fruits— B. S. Brown.....	1.65	Soils—By Charles W. Burkett.....	1.90
Grape Growers Guide—Chorlton....	1.65	Nature's Garden—Neltje Blanchan..	6.30	Spraying Crops—C. M. Weed.....	1.00
Grape Culturist—A. S. Fuller.....	2.15	Nursery Manual—Dr. L. H. Bailey...	2.65	Standard Cyclopedia of Horticulture Edited by L. H. Bailey. In six vol- umes. 3,600 pages. 4,000 text engravings. 96 sepia halftones. 500 collaborators. May be had on installment payments.....	40.00
Greenhouse Construction—Taft.....	2.40	Natural Style Landscaping—Waugh	2.65	Strawberry in North America—S. W. Fletcher.....	1.90
Greenhouse Management—Taft.....	2.40	Manual Tropical and Sub-tropical Fruits—Popenoe.....	3.90	Strawberry Growing—S. W. Fletcher	2.40
Hedges, Windbreaks, Shelters.....	1.00	Nut Culturist—Andrew S. Fuller....	2.15	Success in the Suburbs—John R. Mc- Mahon.....	2.15
How To Grow Roses—Robert Pyle..	1.35	Nut Growing: Latest Information; Guide to Propagating—By Rob- ert T. Morris.....	2.65	Successful Fruit Culture—Maynard	1.75
Injurious Insects—F. L. Washburn..	2.65	Ornamental Gardening—E. A. Long.	2.15	Surgeon's Philosophy—Dr. R. T. Morris.....	3.15
Insects of Economic Importance— Herrick.....	2.15	Principles of Floriculture.....	3.40	Systematic Pomology—Waugh.....	1.90
				Ten Acres Enough—I. P. Roberts...	1.75

A paper which gives the best value for the money to the reader will give the best value to the advertiser as well. I don't think there is any argument about the soundness of this view.—H. Dumont, Chicato, Ill., in Printer's Ink.

WANTED Names and Addresses of Owners of Groves of Native Nut Trees in Northern States.

*In the interest of Northern Nut Culture this Journal desires the
above information to serve as a basis for extension of Nut Culture.*

Readers will confer a favor by sending us lists of names and addresses of those who have stands of nut trees on their property, (with some account of productivity if practicable). Black walnut, English walnut, butternut, hickory, chestnut, filbert, etc.

American Nut Journal P.O. Box 124 Rochester, N. Y.

BUDED and GRAFTED Nut Trees

Start right with my hardy Pennsylvania grown trees and be assured of success.
Attractive Catalogue Free.

I have this season a fine lot of stake trained Pecan, English Walnut, Black Walnut and Persimmon trees budded on root pruned transplanted stocks, that will please you and that will transplant easily and safely. Write for catalogue.

J. F. JONES, The Nut Specialist
LANCASTER, PA.

THIS SPACE
\$2.50 Per Month Under Yearly Contract
Under less than yearly term:
\$2.80 Per Month

GRAFTED PECAN TREES
ALSO BUDED ROSES and SATSUMAS
We Solicit Your Inquiries
Carol Plantation Nurseries,
THEODORE, ALA.

Texas Pecan Nursery
Arp, Texas
*THE PEOPLE THAT GROW
WELL-ROOTED PECAN TREES*

CONSULTING TROPICAL HORTICULTURIST and TREE EXPERT

HARVEY C. STILES

COLUMBIA, TEXAS

Specializing in Pecans, Grapefruit, Avocados, and Landscape Development. Long experienced expert for—and present active director of—many such large projects throughout tropics and semi-tropics. Examinations, Reports, Plans, Specifications and Estimates. Correspondence suggested.

Have You Nuts to Sell?

HICKORY NUTS BLACK WALNUTS
BUTTERNUTS CHESTNUTS

Hundreds of buyers are asking where the nuts can be obtained in quantity. Place your Sale Advertisement in the AMERICAN NUT JOURNAL for quick returns. \$2.80 per inch.

39 State St., Rochester, N. Y.

American Nut Journal

**DEVOTED TO NUT GROWING INTERESTS
GENERALLY THROUGHOUT THE AMERICAS**

Vol. XVIII, No. 2

FEBRUARY, 1923

Per Copy 20c.



MRS. FANNIE S. SPITZ, Albuquerque, N. M.
Inventor of the F. S. S. Sunshine Nut Shelling and Separating Machine

39 STATE ST.



ROCHESTER, N. Y.

American Fruits Publishing Co.

Improved European FILBERT PLANTS Now Available

We, ourselves, are now prepared to accept orders for our Improved European Filberts.

Heretofore our supply has been very limited and has been exclusively offered by L. W. Hall Co., Nurserymen, this city. And while the Hall firm will continue to offer our plants—the ONLY Nursery to whom we have accorded that privilege—increased production now enables us to offer of our product ourselves.

Our plants are carefully selected, dug, packed and shipped under the personal supervision and direction of our Mr. Vollertsen.

Each plant bears Originator's label of the variety.

Our price for 2 ft. and up plants is \$1.50 and for 3 ft. and up plants, \$2.00, F. O. B. Rochester, N. Y., cash with order. These prices and terms are the same as Hall's.

Our plants are splendidly rooted and finely branched—the kind that, carefully transplanted and given reasonable care and attention, will begin to bear abundant crops of delicious nuts within two to three years after transplanting, and regularly thereafter, indefinitely.

For grace and beauty, too, no more staple decorative shrub for lawn-planting can be desired than our Improved European Filberts.

Our Filbert Nursery is the only thing of the kind in the Western Hemisphere, the original 100 plants having been imported from Germany in 1911 by our Mr. McGlennon, and our Nursery developed from same by our Mr. Vollertsen.

After long years of careful experimental work and tests we are convinced that our Filberts are very hardy, having successfully withstood the severe Winters here, where the atmosphere is invariably very damp and frequently the temperature drops to considerably below zero.

Our Improved European Filbert is undoubtedly THE ONE nut-bearing plant wholly adapted to the more Northern latitudes.

In September 1922 the Northern Nut Growers' Association, in convention here, visited our Nursery and heartily endorsed our accomplishments and efforts as worthy.

The McGlennon-Vollertsen Filbert Nursery, 528 Cutler Bldg., Rochester, N. Y.

The Logical Market Place for Sale of Nuts

The Advertising Columns of the *American Nut Journal* Chief Exponent of the Trade.

Hundreds of Readers of this Journal Ask for Pecan Nuts in Moderate Quantity at Prices Less Than the Retail Price per Pound in Northern Markets. They Would Be Eager Buyers if They Knew Where to Apply. If There is Any Surplus at Any Time, the Advertising Columns of this

AMERICAN NUT JOURNAL

Journal Will Dispose of It. Rate, \$2.80 per Inch. Announcement Should be Maintained the Year Around (Yearly Rate, less than 60 Cents per Inch a Week) to Secure Best Results. Make Your Name a Household Word Wherever Pecans Are Wanted. Make It Easy To Procure Them.

P. O. Box 124

ROCHESTER, N. Y.

HARDY POMEROY ENGLISH WALNUT TREES

Write for Prices of Trees and Further Information

Visitors Always Welcome
LOCKPORT, N. Y.

ALBERT C. POMEROY
POMEROY ENGLISH WALNUT FARMS

Budded and Grafted
HARDY NORTHERN NUT TREES
Best varieties, grown in natural nut soil. Send for catalog. Have your seedling nut trees topworked to these fine varieties.

Information and estimate on request.
INDIANA NUT NURSERY
Rockport, J. F. Wilkinson, Prop. Indiana



GIVE THE BIRDS
A "WELCOME
HOME

USEFUL, ARTISTIC, UNIQUE
\$1.25 EACH
FOSTER BROS. 902 G ST. N.W.
WASHINGTON D. C.



ORCHARD OWNERS OF THE SOUTH-EAST AND GULF STATES

Reports furnished on pecan and fruit orchards, giving variety, age, size and condition of each tree; also notes on general conditions and needs of orchards. Care and management of orchards a specialty.

HORTICULTURISTS INCORPORATED
6th Floor, Exchange Bank Building
Albany, Ga.

PECAN TREES

We Grow Them Right
We Pack Them Tight
We Price Them Right

Southern Nut Tree Nurseries,
THOMASVILLE, GA.

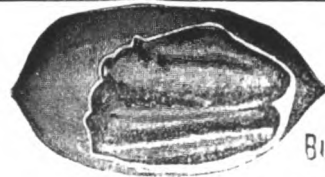
PECAN TREES

100,000 TREES—STANDARD VARIETIES
WE GROW NOTHING BUT PECAN TREES
HIGH QUALITY—SERVICE THE BEST

SIMPSON NURSERY CO., MONTICELLO, FLA

THIS SPACE

\$2.50 Per Month Under yearly Contract
Under less than yearly term:
\$2.80 Per Month



"The
Pecan
Business"

NEW EDITION FREE

A practical guide showing how to bud pecans. Tells how to grow trees 12 inches in diameter by the end of the 8th year, which yielded 400 lbs. nuts per acre.

Trees, Nuts, Groves for sale direct without agent at attractive reduced prices
B. W. STONE, Thomasville, Ga.

SUCCESS

and other leading varieties. Also citrus
BECHTEL PECAN NURSERIES
Ocean Springs, Miss.

PECAN TREES

Plant them this year! Buy direct from nursery and save agent's profit. All standard varieties; quality and service the best. Write us for prices.

FLORIDA NURSERIES
W. W. Bassett, Prop., Monticello, Fla.

AMERICAN NUT JOURNAL CHIEF EXPONENT OF AMERICAN NUT INDUSTRY

Of National Circulation

Covering Every Phase of Nut Culture

Subscription: - - \$2.00 Per Year
Advertising: - - \$2.80 Per Inch

Official Journal { National Pecan Growers Association
Northern Nut Growers Association

AMERICAN FRUITS PUBLISHING COMPANY

39 State Street, Rochester, N. Y.

value than any crops which have previously been carried upon these hill sides when they were at their best.

There seems to be a prevalent opinion that nut trees require a long time for coming into profitable bearing. This is an old-fashioned idea not expressed by well informed people today. In olden times before we possessed grafted and cultivated kinds of nut trees, the hickory or walnut or chestnut tree was obliged to enter into competition with other plants in the wild. It had to struggle for sunshine, food and moisture. When thus left to care for itself a good many years of time were required before the tree came into bearing.

NUT CROPS SOON AS OTHER FRUIT CROPS

Now-a-days grafted trees given the advantages of cultivation sometimes begin to bear in the following year after they are set out, or top-worked. The question of profitable bearing, however, is another matter. Profitable bearing of cultivated nut trees may be placed in parallel with profitable bearing of cultivated apple trees. The Yellow Transparent apple, for example, may begin to bear in the year after it is set out, while the Northern Spy may require twelve years before beginning to bear. The Yellow Transparent apple tree may begin to bear profitably four years after it is set out and the Northern Spy apple may begin to bear profitably twelve years after it is set out. Precisely the same thing may be said of cultivated nut trees. Some varieties of the Persian walnut are very capricious in their demands for the right kind of soil and climate. Other kinds, less aristocratic, put up with many adverse conditions. Among the black walnuts we now have half a dozen varieties cultivated because of exceptional qualities. Nut growers are actively looking for more new kinds of black walnuts with thin shell, good cleavage, and high quality, regardless of size. The number of shagbark and shellbark hickories and their hybrids which are now being grown already make a rather formidable list in the Nurserymen's catalogue. The chestnut group includes a very large range of kinds. We have the large, coarse kinds, which are used for cooking purposes and on the other end of the line delicious little chinquapins. There are now many hybrids between the different kinds, selected because of good qualities. Everyone in this country who has a door yard should at least grow a couple of chinquapin bushes of the sort which are ready as far north as Massachusetts.

Some of the hybrid chestnuts which are quite blight resistant, even though not wholly immune, may bear heavy crops for several years before becoming disabled and that time may be extended by the gardener who trims out blight as fast as it appears. Some of the hazels constitute the most beautiful of shrubs or small trees and belong in the decorative group where they combine the Greek ideal of beauty with usefulness.

A most interesting new field is being widely opened with the hybridizing or crossing of different kinds of nut trees for the purpose of bringing desirable qualities in progeny. This is fascinating work which appeals to almost anyone with a speculative turn of mind. It is very pretty and delicate work of the sort which would appeal particularly to women who love trees.

At this point I show a series of slides upon the screen illustrating nut trees of various kinds.

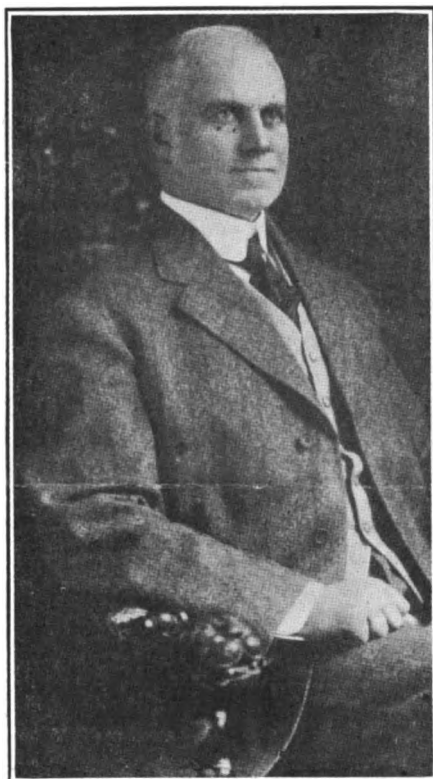
Our Department of Agriculture of late years has given close attention to the subject of nut culture and it had been my intention to use a series of slides loaned by the Bureau of Pomology and at the disposal of horticulturists who wish to address audiences on the subject of nut culture. Through some mishap my Washington slides did not arrive in time for this afternoon's program and I am showing slides prepared by Dr. William C. Deming and Prof. J. Russell Smith, sent to me at the last moment by Dr. Deming.

NUT TREE GRAFTING

Following the demonstration upon the screen let us now take up the question of nut tree grafting. For centuries the almond has been grafted readily and it has furnished a chief income producing crop in some parts of the world. Methods of propagation of the hazels have allowed cultivated varieties of

hazel species to assume an important position in European, Asiatic and African agriculture. Grafting of the chestnut belongs to old established procedure. On the other hand, grafting of walnuts and hickories, belonging to two of our most important tree families, has been so difficult that work in this field has progressed spasmodically and more or less unsatisfactorily. A study of the reasons for this difficulty has led to the introduction of quite a new principle.

At this point let me show a melting apparatus devised particularly for grafting purposes. It is a transformed lantern, arranged in such a way that the temperature of the paraffin may be adapted to varying conditions of weather. Application of this new principle allows easy grafting of difficult species and it has opened up a vast new field for the grafting of fruit trees in general and for ornamental trees, and for practically all trees in fact. The new principle allows almost anybody to graft almost any sort of tree at almost any time of the year. We apply melted paraffin to all parts of a graft, covering buds and all as well as the wound. It prevents desiccation



DR. ROBERT T. MORRIS, New York City

or drying off the graft, which so often occurred under older grafting methods. Furthermore melted paraffin fills interstices in which sap formerly collected and fermented at times. That feature is now out of the way. Paraffin being translucent allows the actinic ray of light to set chlorophyll into activity. The chlorophyll element is the most important one relating to cell growth in the higher plants.

Examples of various forms of grafting of the shagbark hickory and of the apple are now passed about in the audience.

Curiously enough some of the expert horticulturists have been very slow to take up new grafting methods. I presume it means that the safety of an established habit is commendable within its limitations. Some hickory and walnut scions were sent to a friend in the West with the request that they be kept out of the hands of his gardener and given to some youth who was to follow certain instructions. A year or so later this friend, a very busy man, was asked about the success of the grafting. He replied that it had been a failure and his gardener thought it was due to some fault of the scions. My friend was reminded that he had been warned against putting the grafts in the hands of his gardener and advised to put them in charge of a boy who was to follow instructions. He replied immediately, "Oh, my gardener is a very experienced man," to which I responded, "That was the trouble." Visualize, if you please, a picture of a fine, old, dependable

Scotch gardener taking up a quite new idea at the request of a man with whom he was unacquainted.

ASSOCIATIONS AND THE JOURNAL

We have at the present time in this country the National Pecan Growers' Association, devoted to the development of the commercial side of the business, the Western associations doing commendable work, and the Northern Nut Growers Association, which includes many of the experimenters as well as practical nut growers. Membership in the Northern Nut Growers' Association costs only \$2.00 per year and subscription to the *American Nut Journal* costs the same, but the two may be combined for \$3.25, which is about the cost of one good dinner at a New York hotel. A dinner is soon gone, but the membership and the subscription last for a whole year. Members of the audience will wish to take advantage of this combination for themselves or for some friend who would like to pay off the mortgage on his farm. They may send their names to Mr. James S. McGlennon, president of the Northern Nut Growers' Association, or to Mr. Ralph T. Olcott, editor of our *Journal*, both of Rochester, New York. I will see that the matter receives attention also if names are sent to me. My address may be found in "Who's Who of the Masses," known as the telephone book, or just New York City will be address enough.

A number of our agricultural periodicals are taking increased interest in matters relating to nut growing and *The Garden Magazine* is forwarding the subject under the enthusiastic supervision of Mr. Leonard Barron.

Nut trees belong among the beautiful trees as well as among the useful ones. Appreciation of that fact has led to their adoption of late years in ever increasing numbers for roadside planting and for public parks. At the moment there is a controversy over the question whether the pecan or the black walnut should be chosen as our national tree. Each side has advocates carrying the convincing manner that goes with righteous conviction. Aside from the commercial aspects, and anything so gross as the food supply question, the growing of nut trees in the garden will furnish pleasure to all who enjoy the doing of things that are a little out of the ordinary.

Nut growing is now carried out on a very large scale in some parts of the country with thousands of acres devoted to the subject. On the other hand, many a farmer may be put in the way of adding such a profitable side line to the regular farm crops and herds that he will keep his head above water by holding on to the side line.

The future of nut growing does not include the idea that we must dispose of nice tender lamb chops or juicy tenderloin steak smothered with onions or other delicious things which already lead us merrily to the table. It means only that we are to have limitless addition of more good things with corresponding reduction in the cost of living and at the same time less strenuous reaching out for new land.

The Ohio Experiment Station announces that for satisfactory fruit production, nut trees are spaced 40 to 60 feet apart. Professor Gourley recommends grafting or budding to make sure of getting the choicest fruit. Seed from choice black walnut and hickory are recommended for planting. Although a few English walnut and pecan trees are in bearing in the state, they should be planted sparingly by amateurs.

Charles O. Henninger, Indianapolis, Ind., is a firm believer in the possibilities of English walnut culture in the Northern States. He cites the case of D. H. Hulsemann, Lakeside, Wash., whose seedling English walnut orchard—subjected to temperatures at times of 10° to 13° below zero—is a pronounced success, producing fine walnuts in quantity, the demand for which exceeds the supply.

D. K. Dunn, Wynne, Ark., says there are many native nut trees in Northern Arkansas: Pecan, hickory, black walnut, butter-nut and beechnut.

If it relates to nut culture it should be in the *AMERICAN NUT JOURNAL*. Please send it in.

AUTOBIOGRAPHY OF A TEXAS PECAN PIONEER

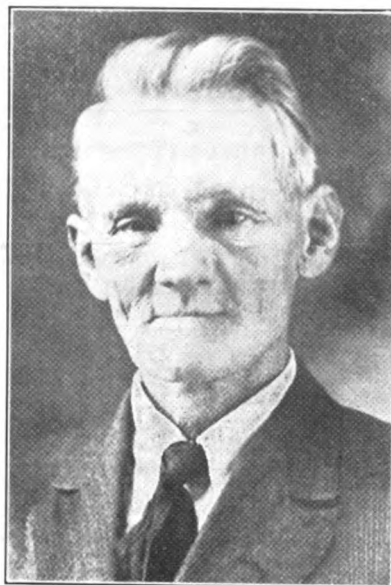
Record of the Founder of the House of E. E. Risien & Son Which Has Just Captured All the Big Prizes in the San Saba County Pecan Exhibit

On March 20, 1853, in the town of Deal, County of Kent, England, the writer of these lines first breathed the breath of life, the last one of a family of eight; six sons, two daughters. Father was of French and Scotch stock; mother pure English; maiden name Chambers. Our mother's head wasn't filled with fashions and frivolities, but home building. She kept her mind where it belonged; in fact she was the pre-potent factor in all of her offspring, so much so that she will not be dead as long as any of them are living. She was clever; hence we are all natural born mechanics. Father was a merchant in a small way, but industrious, although of no mechanical ability. They both did for all of us all that it was possible for them to do with their very limited means; hence we all had to shift for ourselves rather young; but it proved a blessing in disguise, for we all got busy and did well enough, although scattered far apart; one in South Africa; one in Michigan; three in Texas. Anyway we all got under our own roofs and didn't buy them ready-made either, myself landing in Galveston, February 1872, with less than \$5, but didn't stay there.

Now to make a long story short, 1876 found me with enough money in the little frontier town of San Saba, Texas, to buy a ticket to the Centennial Exposition, Philadelphia. Competition in city life didn't appeal to me any more, so returned to San Saba flat broke, 100 miles from the nearest railroad, Austin, and getting mail only once a week. Telephones were not invented; no telegraph communication either; in fact, I don't now know how the merchants managed, but they prospered just the same. Neither was barbed wire invented, so free grass was everywhere; game of all kinds plenty; the rivers alive with fish; only a few scattering farms fenced with rock or mountain cedar. Buffalo meat came to town by the wagon loads; the supply was greater than the demand. Good venison hams and wild turkeys were only 50 cents each. The real wild west shows would sometimes be staged on the public square. I got fairly well acquainted with the people before I left, so found plenty to do on returning; but as it didn't bother me to do most anything, I did better making plain furniture, mostly tables and chairs; and when a coffin was needed that was my job.

Pecans then I knew nothing about until I came to notice that all through the months of October and November wagon loads of pecans would accumulate on the public square, waiting for the merchants to buy them. The town being situated between the two rivers, Colorado and San Saba, was ideally located for quick sales. No restriction whatever for anyone to help themselves. I had a good mouthful of teeth and made good use of them. So this is the way I first got interested. Most of them came from free trees, so free, in fact, that many a one got cut down to get the crop of nuts; but

that method, like the slaughtering of the buffalo, didn't last long. Stringent laws were made to stop it. In those days enough sacks were not always available, so the nuts were thrown into open wagon beds, but when an extra choice tree was found, a sack was on hand, they were called our "eating pecans." The great varieties became interesting and attractive to me. Finally I offered a premium of \$5 for the best five pounds. This way I got better acquainted with the people and when I asked questions about the yield, etc., invariably the reply would be: Come and go home with me and stay all night, and I did. I was glad of a change and then too this went on for sev-



E. E. RISIEN, San Saba, Texas
Originator and Producer of Texas Pecan
Nuts De Luxe

eral years until I knew pretty well how to get a choice little lot, for a present or whatever use I had for them; in fact I became quite a connoisseur sampling so many.

The next great surprise that overtook me was in 1879, when I found myself married, but this did not have the effect of stopping my interest in what I was fast becoming enthusiastic about. There was more future to be considered now. I still kept my advertisement in the paper of \$5 for the best 5 pounds. We were now getting a daily mail; the railroad had moved out from Austin, coming our way. So I was able to do a little business by sending samples through the mail. About the year 1882 my attention was called to a sack of pecans that the owners said was some of their own eating pecans. They had more than they wanted, seven bushels, and as they were small I could have them for five cents a pound. When I sampled them my teeth sunk in the shell so quick as to make me examine with care. I bought them at once, for they were what I considered paper shell de luxe. The nutty flavor, the rich, oily texture of the meat excelled any I had given a premium

for. On making inquiries where they came from I learned the tree was growing in the immediate confluence of the Colorado and San Saba rivers, nine miles from town, then public property for every one to help himself. The owner of the land lived in Alabama and had never seen it. I sent samples of these nuts to various Nurserymen, putting the price at \$1 a pound. I sold them all at this price. George C. Roeding of the Fresno Nurseries, California, took 20 pounds. These little orders were followed by wanting wood from the original tree for grafting. Now I had been married long enough to be needing every dollar and more too, so one Saturday I went back home with those whom I bought the nuts from. They took pleasure in showing me the tree Sunday morning. I would pay a liberal price now for a photograph of what I saw there. Here is the way that seven bushels were gathered. It was just about 30 feet to the first limb, so by getting a rock and tying it to a fishing line, which was easily thrown over a low limb, afterwards followed by a rope, the climber was hauled up to the center of the tree; then followed a good sharp ax. He only left one small limb and when I asked: "Why didn't you cut that off too?" he smiled and said, "I don't know." But there is a silver lining to every cloud. It didn't share the fate of many by standing on the ground to use the ax. There were two trees growing close enough to touch each other; about the same size; the other one was so worthless that they didn't bother it. So when I came to be the possessor of them I had the other cut down to give the old almost ruined paper shell every show to recover. My theory is that both trees came out of the same seed nut—something not very uncommon. This tract of land which is plainly located on any map of Texas was on the market for a low price, still belonging to the first owner, a government grant. It will not be necessary to explain how I finally became the owner for a consideration of \$1000 for 320 acres, with all the time I wanted to pay for it; the best piece of pecan land in the state, (or any other state), and with only one fence to build from river to river, about one mile; two-thirds of it on high table-land, overlooking the valleys for miles. The barbed wire was now coming into the country to fence up land that had always been free. Fence cutting got to be common. Anyway it was a year after I built my fence before I closed the three openings left for gates. It became private property only little by little. I now had some land so completely isolated that I had no intention of ever living on it. I knew the pecans and grass would be a revenue without any more improvements and give us a place of refuge, should misfortune overtake us. Well, adverse conditions did come and we were glad to move on it. I built a shack and moved in it, wife and three children.

This tract of land was not desirable for

NATIONAL PECAN GROWERS EXCHANGE

The Exchange has had one of the most successful years in its history. Comparing the size of the crops in 1921 and 1922, the Exchange has had a wonderful growth. In other words, while the pecan crop this year did not average 20% of last year, and in many cases not over 10% of last year's yield, yet the Exchange has handled practically 50% of what it handled last year, and is the largest handler of papershell nuts, not only in Georgia, but in the United States.

Average prices received by the Exchange for the varieties and qualities of nuts is not exceeded by any one.

The Exchange now has close to 20,000 acres in its membership, which includes the states of Georgia, Alabama and Florida. We are lining up new members and expect this year to handle probably double the tonnage that we have ever handled before. We are getting many voluntary promises of support that not only encourage us but point to a great enlargement of the Exchange and its sphere of usefulness.

Although this has been a short crop year, yet many growers have not been able to sell and are now applying to us for help. A letter received today from a grower says: "I failed to join the Exchange this past year and now see my mistake. Please send me your papers at once so I can get in the Exchange without delay." A letter under date of the 10th inst. from a Florida grower says: "I have on hand 800 pounds of choicest papershell pecans. Please advise if you know any place I might get a sale for them." We are writing this grower that if he will sign one of our five-year Marketing Agreements then we will accept his pecans even at this late date. There are a great many nuts carried over in the trade that could not be resold at a profit, due to the fact that growers shot these markets to pieces with lower prices.

This Exchange has succeeded in securing, through the Albany District Pecan Exchange, one of the finest plants for co-operative marketing purposes to be found outside of California's great co-operative plants. Recently three of the most conservative men in Albany placed their signatures to a statement that this new plant is worth \$50,000.00; and bear in mind that this has been procured entirely through the efforts of this Exchange and solely for the purposes of co-operatively handling and marketing pecans.

farming, so broken up with rocky hill land, and the valleys were too small, besides subject to overflow from both rivers. So as the people were getting the good of it free, why buy it!

Now farming, grafting and budding trees was all new to me, but I muddled through somehow with the aid of a little bunch of cattle, horses, turkeys, chickens, pigs and fish, squirrels and pecans every year until I bought out some more land that came on the market. I don't want any more. Fearing I may tire the reader, this is in brief how I came to be a pecan crank, not a wizard as some will have it. I have done fairly well making my calculations ahead, but I had no way of knowing the climate of Western Texas would not always agree with me. Hay fever, or something kept getting worse and worse until I could only get relief by breathing the salt air of the coast country, so this is why I am writing these lines in Galveston (now past seventy) and don't know when I will get up courage enough to return.

E. E. Risien.

No other business and no other products are handled in this new property and the indications are that we shall soon be obliged to build additions.

As soon as conditions justify, the Exchange will go into the cracking business continuously throughout the season and, in order to maintain this plant and justify the installation of vacuum packing machinery, will doubtless have to bring many carloads of seedling nuts from other states.

The Exchange is established and operating closely along the lines of the California walnut and almond associations, which are so successful in that far western state. Our plans and merchandising methods are heartily endorsed by all food brokers and the trade to whom we sell through these food brokers in the United States and Canada.

We invite correspondence from all pecan growers who are interested in our work.

Wm. P. Bullard, President.



YOUNG TEXANS DE LUXE
Grandchildren of E. E. Risien, San Saba,
Texas

HEFFNER'S CHESTNUT ORCHARDS ATTACKED

H. Heffner, Leeper, Pa., whose successful chestnut groves have been described in the *American Nut Journal* as having fortunately been beyond reach of the chestnut blight, have been attacked by the blight at last. Mr. Heffner last month said that the blight had been active in his section for half a dozen years. He has already lost about 20 Paragon chestnut trees. Certain other varieties are more resistant. He is still grafting those showing most resistance. Leeper is in Clarion county, in northwest Pennsylvania.

G. H. Corsan, Brooklyn, N. Y., a member of the Northern Nut Growers Association and an enthusiast in nut culture, says in the *New York Times*:

Last June, on the outskirts of Lancaster, Pa., Mr. J. F. Jones was showing me the destruction caused by the Fall tent worms. They were destroying the black walnut trees by defoliating them year after year. The third year of defoliation means the death of the tree. At the same time, I showed him, on some low bushes, some cuckoos' nests, with their blue eggs cold and all life within killed. These eggs showed the claw mark of the cat which had snatched the mother bird from the nest for her litter of kittens in the barn. Mr. Jones came back with his fear of rats! This is an absurd excuse for keeping cats, for there are hundreds of better and more effective ways of getting rid of rats than by keeping cats. I use these other methods; I also kill the cats, and the cuckoos save my trees."

THE ALMOND

A striking instance of the competition of tree root in soils has recently been observed, which shows most conclusively the importance of adequate planting distances of trees, and of understanding fully what the trees require in the way of soil moisture and other plant food, in order to properly determine that distance.

In the lower foothills rising out of the Sacramento Valley, in Colusa county, California, near Arbuckle, is an old orchard of trees planted probably 25 years ago. The north edge of this orchard is planted to a row of trees spaced about 12 feet apart. Immediately north of this is a road in a lane, between this orchard and a younger orchard planted immediately north of that. The young orchard is approximately seven years of age.

The distance across the lane between the nearest rows of the old and young orchard is about 60 feet; while the trees in the main body of the young orchard are at least 12 feet high, in the outside row, next to the lane, they are in most cases only about three feet high. Every exception to this, where the trees in the outside row are larger, has been found to be opposite an open space where a tree is missing in the outside row of old trees on the south side of the lane. Occasionally two trees will be missing together in this old row, and opposite in the young orchard the trees in the first row are much larger, in some cases being six or seven feet high. The interesting point is, that in every case, the larger trees in the first row of the young orchard are opposite open spaces in the row of old trees.

The second row of trees in the young orchard consist also of notably stunted trees, the trees averaging approximately half the size of the trees in the third row and beyond. It is obvious that the row of old trees occupied the area to the north for a distance of at least 75 feet and probably more.

To the west of the above mentioned old orchard, is another orchard, planted not over 10 years ago. Here, again, the first two rows are notably stunted, the first being much smaller than the second, and the third and succeeding rows being full size. On the west side of the old orchard the trees were not planted as close together, so that they probably did not have to reach quite as far as they did to the north, but even then, it was perfectly evident that the roots of the trees in the old orchard had occupied the ground to the west for a distance of at least 60 feet.

It is also a notable fact that in the old orchard, the outside row of trees is distinctly larger than the trees on the inside of the orchard, which are surrounded on all sides by other trees.

All these facts point to the extreme importance of so planting and caring for the trees that they will have adequate soil area to supply them with moisture and plant food in sufficient quantities to carry the trees not only when they are young, but when they are fully matured and are bearing a crop of nuts as well. R. H. Taylor, Production Dep't, Cal. Almond Growers' Ex.

M. M. Kaufman, Clarion, Pa., long a member of the Northern Nut Growers' Association is lecturing on nut culture, using illustrations.

If it relates to nut culture it should be in the AMERICAN NUT JOURNAL. Please send it in.

American Nut Journal

COVERING NUT CULTURE

NORTH—SOUTH—EAST—WEST

AMERICAN FRUIT PUBLISHING CO., INC.
89 State Street Rochester, N. Y.

RALPH T. OLCOTT, Editor and Manager
Official Journal Northern Nut Growers' Assn
Official Journal National Nut Growers' Assn

SUBSCRIPTION RATES

One Year, in advance.....\$2.00
Canada and Abroad..... 2.50
Single Copy20

ADVERTISING RATE

Per column inch.....\$2.80
Forms Close 10th of each month

ROCHESTER, N. Y. APRIL 1923

NUT ASSOCIATIONS

California Almond Growers' Exchange—
President, G. W. Pierce; manager, T. C.
Tucker, 311 California St., San Francisco.

California Walnut Growers' Association—
President, C. C. Teague; secretary, W. T.
Webber; manager, C. Thorpe, 1326 East
Seventh St., Los Angeles, Cal.

Georgia-Florida Pecan Growers Association—
President, J. M. Patterson, Putney,
Ga.; vice-pres., A. C. Snedeker, Blackshear,
Ga.; sec'y-treas., J. S. Wight, Cairo, Ga.

National Pecan Growers Association—
Prest., Charles A. Simpson, Monticello, Fla.;
vice-prest., J. M. Patterson, Putney, Ga.; and
E. C. Butterfield, Winona, Tex.; secy., J.
Lloyd Abbot, Spring Hill, Ala.; treas., J.
Slater Wight, Cairo, Ga. 1923 meeting,
Jacksonville, Fla., Oct. 2-4, 1923.

National Pecan Growers' Exchange—
President and manager, William P. Bullard,
Albany, Ga.; vice-pres., J. B. Wight; secy-
treas., A. D. Galt.

Northern Nut Growers' Association—
President, James S. McGlennon, Rochester,
N. Y.; vice-pres., J. F. Jones, Lancaster,
Pa.; treas., Willard G. Bixby, 32 Grand Ave.,
Baldwin, N. Y.; secy., Dr. W. C. Deming,
983 Main St., Hartford, Conn. 1923 conven-
tion, Washington, D. C., Sept. 26-28.

Southeast Georgia Pecan Association—
President, Dr. W. H. Born; vice-pres., Col.
G. H. Harris; secy, J. H. Girardeau, McRae,
Ga.; treas., E. F. McRae.

Texas Pecan Growers' Association—Presi-
dent, H. G. Lucas, Brownwood; vice-pres.,
John P. Lee, San Angelo; Secretary, Oscar
Gray, Waxahachie.

Western Nut Growers' Association—Presi-
dent, Ferd Groner, Hillsboro, Ore.; secy-
treas., C. E. Schuster, Corvallis, Ore.

LIVE WIRE CURRENTS IN TEXAS

San Saba, Tex., has long been on the map as the center of pecan activity, in the production line at least, in the great Southwest. San Saba folks insist that this town is the center not only as to the Southwest but as to the world at large, when it comes to a question of pecans. The recent pecan exhibit referred to in these columns, was dominated by E. E. Risien & Son, a San Saba concern, and anyway San Sabans propose to make that little spot on the map stick out stronger than ever in pecandom. They are continually at it. When we laid aside yesterday the better part of the front page of a recent issue of the San Saba Star, we elected to turn to other matters when almost the next thing we picked up was a copy of the San Saba News announcing in two columns a Pecan Day for school children of the county arranged for a date in May by A. W. Woodruff and William Millican whose middle name in each case is Pecan. They say:

The demonstration will be given to stimulate interest in growing improved varieties of pecans in San Saba county, the home of the original pecan, and to arouse interest in the minds of young people of the county in

regard to this coming important industry. There is no other line of endeavor that is so sure and profitable as pecan growing, and the boys and girls who will make their own homes in San Saba county should be interested in finding out and learning the rudiments of this important line of work—one of the finest occupations that can be taken up.

Last month Mr. Woodruff closed a preliminary contract with a representative of Los Angeles capitalists for the purchase of a tract of 1,000 acres of land on the Colorado river in San Saba county, on which they plan to put out some three hundred acres in pecan orchards next winter. This place has about four miles of river front, with native pecan trees all along the bank of the river, and the fields now being devoted to corn and cotton have almost ideal pecan soil. Very little will be needed in the way of irrigation as most of the soil is alluvial and retains ample moisture even in our drouth periods.

"This deal," says Mr. Woodruff, "is only a starter toward getting 25,000 acres or more of our San Saba county land into pecan orchards.

"I am opposed to the idea of a pecan growers exchange, promulgated by some well-meaning but misguided individuals, who do not realize that you must first have a commodity that can be standardized and properly graded before you can get anywhere with co-operative marketing. They are putting the cart before the horse; and, to mix metaphors a little, trying to make the tail wag the dog. Such efforts hinder a real pecan industry, and my attitude is that it will be a happy day when all the native pecan trees in Texas are worked over into improved varieties, or those that are not suitable, dug up and got out of the way for a good tree. Then there will be a real pecan industry, and I am going to fight any other idea to the limit of my humble ability."

THE MORRIS BLACK WALNUT

Recently H. R. Mosnat, Chicago, Ill., a member of the Northern Nut Growers' Association, making original investigations in northern nut culture, located a black walnut of merit which will be used for propagating. He named it the Lewis, in honor of Prof. C. I. Lewis, of the American Fruit Grower.

Almost at the same time he located another valuable black walnut tree, nuts from which he sent, for testing, to prominent members of the Northern Association. He has obtained the consent of Dr. Robert T. Morris, New York City, to name this the Morris. Dr. Morris tested the nuts and found them first class. He says the Morris black walnut will be especially suitable for the confectionery and baker trade. The Lewis black walnut is for table use.

Dr. W. C. Deming, Hartford, Conn., secretary-treasurer of the Northern Association says of the Morris black walnut: "I am very glad to have seen the Morris black walnut which is exceptionally good so far as I have tested it. That black walnut is a dandy, judging from the two that I have cracked. It is especially good in the quality of the kernel. The more I recall it the more I like it."

The original Morris black walnut tree has two large trunks and is more than seventy-five years old, at least. It is known that it has borne nuts for more than fifty years. It was a "bee tree"—wild honey in it. Not long ago some bee hunters sawed off one of the large trunks entirely and about one-third through the other trunk, so that it has undoubtedly been fatally injured. Mr. Mosnat secured scions and is propagating them.

Northern Nut Culture

Readers' Expressions on the Work in Hand:
Development of the Industry

[Expressions by readers are requested by the editor, on the work of developing Nut Culture in the Northern States as outlined by Secretary W. C. Deming of the Northern Nut Growers' Association.]

In a letter to Secretary Deming, Dr. Robert T. Morris, New York, says:

Your Northern Nut Growers' Association literature, received, is the work of an angel with very large wings. It sets the pace for all of us who are busy men and have a lot of habitual first duties like yourself.

It is hard for men to get out of habit ruts and turn to things that are more interesting. I shall keep on with activities in the field of Nut Growing with still better heart because of your moral backing.

WRITE TO THE EDITOR TODAY

The whole subject of Nut Culture in the Northern states—the opportunity and measures for improving it—is outlined by Secretary W. C. Deming of the Northern Nut Growers Association in a communication to the state vice-presidents of the Association which is reproduced in this issue of the Journal. This is such an instructive document, so valuable to all who would join actively in the development of this important industry that we are tempted to keep it standing as a feature of several issues of the Journal until the force of its presentation is appreciated and is productive of a great awakening to the possibilities of Nut Culture.

It is a classic in its line, worthy of permanent record along with articles by other able workers in this pioneer field, of which Dr. Robert T. Morris' address published in the March issue of the Journal is a signal example.

Let us have free and full expression of opinion and pledges of co-operation, through the columns of the official Journal so that there may be mutual encouragement to bring to pass speedily the results which are just in sight. Write to the editor today.

Nut Notes From Illinois

Editor American Nut Journal:

I write to acknowledge receipt of the pinon nuts and thank you for same. I find them the same kind that I received from New Mexico a year or so ago—that is, bean shaped, quite small, and only moderate in eating quality—not to be compared with the kind I bought in Albuquerque, N. M., a dozen years ago. These were of the size and shape of one's thumb nail, and one-quarter to one-eighth of an inch in thickness, and of exquisite flavor. The shell was very thin and meat easily extracted by the tongue when the thin shell was crushed by the teeth.

Those sent were hard and flavorless, not as good as a pecan, hickory nut, or hazel nut. But those I bought—a pound or two—became rancid in a few months.

I have small, two-inch plants of the bean-shaped variety growing in pots; also a small plant or two of the Chilean pinon nut—Araucaria imbricata. But I doubt about raising a tree from any of them. There seem to be several types, and even species, of the pinon in the West and Southwest United States.

Winter mild here but dry. I hope to fruit two or three varieties of the Persian walnut this year, such as Rush, Hall, Pomeroy, and a Chinese sort. The Pomeroy is decidedly tender here, even at 15 degrees below zero; but I suppose it is a seedling and seedlings usually vary.

Benj. Buckman, Farmingdale, Ill.

Mrs. J. F. Wilkinson

In the death of Mrs. Lottie M. Wilkinson, wife of J. F. Wilkinson, proprietor of the Indiana Nut Nursery, Rockport, Ind., the nut world, as well as her husband, suffers a great loss. She was a real nut enthusiast. The success achieved by the Indiana Nut Nursery is largely due to the education, devotion and untiring efforts of Mrs. Wilkinson, though she has been in poor health for several years.

She was ever insistent on planting nut trees and a firm believer in the profitable future of nut orchards.

The pecan was her favorite, and as to its propagation and judgment of the nut, was probably the best informed woman in the northern pecan territory.

She had a wide acquaintance among officers and members of the Northern Nut Growers Association and expected to attend the meeting this fall to become a member.

Mrs. Wilkinson had applied herself to the special study of pecan culture. She was particularly interested in the propagation of



MRS. J. F. WILKINSON

pecan trees and was preparing to write articles on the subject.

No doubt she will be long remembered by the many nut tree lovers who have visited her home in the past, and will be missed by them in their visits in the future.

The many friends of Charles A. Simpson, Simpson Nursery Company, Monticello, Fla., will regret to learn of the death of Mrs. Simpson on March 16th, after but a few days of illness.

The California Almond Growers' Exchange of San Francisco, has established an office at 1403 Peoples' Life Building, Chicago, in charge of M. J. Balme. Walter A. Frost & Co. retains the almond growers' account in the Chicago territory.

The Canadian Department of Agriculture is considering appointment of a nut culturist. Prof. J. A. Neilson, Ontario Agl. College, Guelph, Ont., is the logical man for the place. He is a member of the Northern Nut Growers' Association and has done highly valuable investigational work in this line in Canada.

Prof. Neilson, Guelph, Ont., has sent to H. R. Mosnat, Chicago, Ill., heart nuts from Canada and Persian walnuts from Northern China, for testing in Illinois.

A three-day meeting of the Texas Pecan Growers' association is planned for May at Brownwood, Texas.

If it relates to nut culture it should be in the AMERICAN NUT JOURNAL. Please send it in.

Northern Nut Growers' Association**Office of the Secretary**

Dr. W. C. Deming, 983 Main St., Hartford, Conn.

The Northern Nut Growers' Association offers this year, for experimental purposes, as a premium to each new member, choice of two seedling nut trees, any selection, from the following varieties: Stabler black walnut, Chinese walnut, Persian walnut, Mayette variety. These trees were grown for the association, and have been donated by Mr. J. F. Jones, the nut specialist, of Lancaster, Pa.

STABLER BLACK WALNUT. This variety is unique in that a large percentage of the nuts have only one lobed kernels. These are larger and thicker than the ordinary kernel and when the nut is cracked the kernel drops out clean in a single piece. The crop of 1920 had about 60% of nuts of this type, and these were the nuts planted from which the trees grew. It is at least possible, if not likely, that out of these seedlings now being distributed some will be found to produce nuts all of this type, and if so they will be worth millions of dollars to tree planters.

CHINESE WALNUT. The nuts from which the Chinese walnut trees were grown were given by one of our members, Mr. Wang of the Kinsan Arboretum, and are of the best known strain of this walnut, believed to be the hardiest *Juglans regia* known, and showing evidence of being better adapted to eastern American conditions than other Persian walnuts. The Chinese walnut, *Juglans regia sinensis*, is of the same type as the Persian, or "English," walnut, *Juglans regia*.

PERSIAN or "ENGLISH" WALNUT. These were grown from nuts of the best Mayette strain, one of the oldest and best of the French walnuts.

The association hopes to offer in the future seedling nut trees for experimental purposes of other valuable varieties.

In distributing these seedling nut trees the Northern Nut Growers' Association wishes to make it clearly understood that it does so for experimental purposes and not as in any way inconsistent with the principle it has always advocated, and that is well understood by all fruit growers, that when seeking any assured variety of fruit or nut, with all its known characteristics, only grafted, or otherwise asexually propagated, trees must be planted.

But it is only by planting seedling trees that new varieties can be obtained. From this standpoint every nut tree grown from a seed is a new variety. Some of these new varieties will be poor, some will be good, some excellent and, now and then, a great prize will be drawn. Such a tree will carry the name of the man or woman who grows the tree into bearing and may be a source of great profit because it can be indefinitely multiplied by budding, as is now done with other nut trees, so that in a few years thousands of such trees can be produced and grown in orchards.

For uniform and true results plant grafted trees only. For new varieties plant seedling trees.

If you cannot afford, or cannot get, grafted trees it is better to plant seedlings than none at all. If the seedlings are of good parentage, as are those offered by the association, the results will be more likely to be good.

For roadside planting in quantity seedling trees may be better, because less expensive. Seedling trees, if small when planted, are more easily established than are grafted trees, because grafted trees must have roots several years old, while seedling trees need be only one or two years old. Such roadside seedling trees, if they turn out poor bearers, may be grafted readily to good varieties.

The association offers a prize of ten dollars (\$10) for any variety grown from these premium trees that is deemed worthy, by the association, of propagation, and will give the name of the grower to the variety.

In enclosing \$_____ for a _____ membership in the Northern Nut Growers' Association with (without) subscription to the American Nut Journal, I select for my two premium nut trees _____ Chinese _____ Stabler _____ Persian.

Name _____

Address _____

Date _____

ALL INTERESTS CO-OPERATING

ATENTION to the mutual interests in the Nut Industry is succinctly directed by Manager T. C. Tucker of the California Almond Growers Exchange: "We are a strictly co-operative organization, including Grower, Broker, Wholesaler and Retailer."

This may be said also of organized effort in the production and distribution of Walnuts and Pecans, each of which is represented in Associations.

It is because of this co-operative feature that the American Nut Journal combines the news of the Nut Industry in the fields of Production and Distribution. Its Market and Crop Reports will be of increasing value.

It is of prime importance that the market shall be supplied; a supply is the basis upon which a market exists.

It is also of prime importance that a market be created and maintained; distribution of the product is what makes the industry.

The Journal desires to co-operate heartily with producer and distributor, and to that end welcomes frequent communications by way of comment on current events, personal mention, trade news and suggestions. It is the logical medium for interchange of trade comment and the recording of trade activities.

To the State Vice-Presidents of the Northern Nut Growers' Association and all Members of the Association:

At the 13th annual convention of the Northern Nut Growers' Association held at Rochester, N. Y. Sept. 7-9, 1922, in a discussion on means for enlarging the membership of the association and its sphere of work, a member said that the list of vice-presidents for the different states was printed in the report from year to year and, he supposed, was never changed. The secretary replied that the list was changed every year in the hope of eventually finding a vice-president who would work, but so far the quest had been unsuccessful. He promised, however, that he would write them a quickening letter, if he could. This is the letter. It embodies the ideas on the subject of enlarging the membership of the association brought out in animated discussions at the convention.

At the very beginning the president offered to guarantee a hundred new members in the coming year if each member present would promise to get ten, or turn the money equivalent into the treasury. Ten members responded, thus making two hundred new members, or their money equivalent, promised for this year on the president's initiative act alone. Now the secretary wishes to ask each of the state vice-presidents, or any member who would like to be a state vice-president, to put himself in the place of the members who made these promises—and some of them were new members who had never before attended a meeting—and pledge himself to do the same that they have, namely, to get ten new members, or their monetary equivalent, during the coming year. The president says he must have a thousand members at the time of the next convention. We have 310 and two hundred more pledged; we need, therefore, 490 more.

After this splendid example set at the convention by the president and these ten members—and in several instances the monetary equivalent of ten new members was paid to the treasurer on the spot—it does not seem unreasonable, besides asking each state vice-president to get ten new members, to ask that every other member get at least one more new member this year. And let us hope that this will become every new and old member's perennial habit—getting at least one new member every year, besides paying his own dues—thereby in time enlisting the whole human race. Let us remember that this is a scientific and educational association, supported only by dues and contributions and with no paid officers, and that each member is himself a pioneer and a missionary. A member who feels himself a poor solicitor can easily solve the problem by following the advice of our president and sending a membership, and the Nut Journal, as a present. Then tell the secretary about it.

The secretary further makes the following suggestions, gathered from the discussions at the convention, for increasing our membership and influence.

(a) There should be subsidiary associations or societies, branches of this association, in every state, or in groups of states under similar conditions. Such associations should hold an annual meeting at the time of their state, or interstate, fair and make exhibits at the fairs where great numbers of people could see them. Association literature should be distributed and memberships solicited. Copies of the American Nut Journal and Dr. Morris's book on Nut Growing should be on sale. Many interesting possibilities will suggest themselves. The secretary can supply lists of nut growers and "prospects" in almost any state in the Union to any member who will undertake to try to interest them in a local association.

This would naturally be the duty of the state vice-presidents, but there is nothing in the prerogatives of this office which should deter any member not a vice-president from usurping them in case of dilatory action by the holder of them. In such a case it would certainly not be out of place that the mantle of dignity of this office should fall upon the shoulders of the active member. And the secretary would use his influence with the president to that end.

(b) Those who can give talks before agricultural or horticultural societies or clubs, garden, bird or game clubs, granges, schools and similar institutions, should do so on the subject of nut growing, and not be afraid to show why anybody who wishes to promote that industry should join the Northern Nut Growers' Association. The United States Department of Agriculture has lent us a set of lantern slides, from the great collection of the department, for use in lectures by any member of the association. Application for these slides should be made to the secretary. The secretary has also a small collection of his own which is available. Mr. Weber of Cincinnati has made a very good one for his own use, and others are making them. The secretary will be glad of the loan of negatives of interesting subjects from which to make slides. The secretary will also be glad to furnish, if desired, outlines of talks on various phases of nut growing, and has a small but interesting collection of specimens which, under suitable conditions, he would be glad to lend.

(c) Any one of us can write little articles on nut growing for the local press. Some of us could write magazine articles with illustrations. These are often well paid for. Any one who feels diffident about accepting pay could turn it over to the association which is impersonal and not diffident. The outlines which the secretary has offered to furnish for talks could also serve as outlines for articles, and the secretary could, if necessary, also furnish a number of illustrations. He might further be able to lend aid in furnishing nuts and trees for public planting.

If each of our members would give one talk on nut growing, preferably illustrated, or write one article, preferably illustrated, during each year, it would be of great effect in spreading the gospel.

Many cities have courses in public educational lectures every year for which they pay a small fee and are glad to get lectures on new things like nut growing. Lecturers and writers should never forget to name the Northern Nut Growers' Association and to ask people to join it.

(d) Mr. Jones has offered to give two seedling nut trees grown from selected nuts to each new member up to 500. This includes packing and mailing. Can we not make Mr. Jones realize the magnitude of his offer and use up all of those thousand trees? They include seedlings of the Stabler black walnut, of the Mayette Persian walnut and of specially selected Chinese walnuts. A copy is enclosed of a circular descriptive of these premium nut trees to be sent out with each tree so that there shall be no con-

**IN NORTHERN STATES
GROWS 16 VARIETIES OF NUTS.**

Benjamin Buckman, Farmingdale, Ill., a member of the Northern Nut Growers' Association, and one of the best posted horticulturists in the country, has 1936 fruit varieties in his private experimental orchard. The list includes 1467 varieties of apples. He has 16 varieties of nuts:

Chestnuts—Bertram Early, Boone, Buckman, Chinquapin, Ridley, Rochester.

Walnuts—Thomas (black), Andrus, Pomeroy (Persian), Cordiformis Siebold (Jap.), Royal (hybrid).

Pecan—Columbian.

Filbert—English Cob.

Hazelnut—Native.

Hickory—Seed.

Pioneer Nut Grower In Washington

A grove of many varieties of trees marks a memorial to C. R. Frazier, pioneer, who has just reached his 91st birthday. The trees that thrive on his ranch near Dixie, Walla Walla county, Washington, will probably see many more birthdays than the time-honored pioneer.

More than 2,000 trees that are familiar only to those who have visited or lived in the Middle Western States beautify and shade the Frazier farm.

Walnut, butternut, chestnut, hickory and fruit trees of many numbers and kinds shade the road and provide a permanent fence.

Experiment Station Studies Nuts

Grand Rapids, Mich., April 2.—Two acres of nut trees are to be set out this spring at the Graham Experiment Station, here. Supt. H. D. Hootman said the trees would include Oriental walnuts, black walnuts and butternuts. The station expects to develop and determine varieties suitable for commercial planting in Michigan.

Oregon Growers' Meeting

A meeting of those interested in growing filberts and English walnuts was held at Marsh Hall, Pacific University, Forest Grove, recently. The program was arranged by D. G. Lilly, county leader for horticultural work, and the Washington county agent.

Cash Awards for Nuts

Nut growing is to be encouraged in Iowa by the State Fair Board, which decided at its annual meeting for fixing of fair premiums, to offer cash awards of \$195 for the best exhibit of edible nuts.

Dept. of Agr., Washington, D. C., announces an examination to fill a vacancy in the position of assistant pomologist, to conduct investigations with nuts, Japanese persimmons, figs and other fruits. Salary, from \$2040 to \$2740 a year, plus the increase of \$20 per month granted by Congress.

P. S. Cogswell, long a prominent resident of Rochester, N. Y., now resides on his farm at Hinrods, N. Y., where he is taking up nut culture. He has a large number of hickory trees, two to eight inches in diameter, which he proposes to have top-worked. He will plant 100 hickories for grafting.

Henry D. Spencer, Decatur, Ill., an active member of the Northern Nut Growers Association, is interesting librarians and manufacturers in his section in the subject of nut tree planting. He has placed on file in the libraries copies of the *American Nut Journal* and suggested planting of nut trees on factory grounds.

Frank T. McFarland, head of the new botanic garden at the University of Kentucky, desires a chinquapin, *Castanea pumila*, for the garden. He will be supplied through the action of Secretary Deming of the Northern Nut Growers Association.

An exchange has a department headed: "Pecans, Pop Corn and Other Nuts." We suggest that our contemporary include mignonette, onion and grass seed to give variety.

If nuts are kept cold they will not become rancid.

fusion in the minds of the recipients as to the nature of seedling trees as compared with grafted trees.

I believe that Mr. Jones could be induced to furnish some of these trees for planting on school grounds or in public places if guarantee could be given that they would be taken care of. Mrs. Ellwanger also has offered some seedling black walnut trees and it will perhaps be possible, through ex-president Linton, to get seedlings, or nuts, of the black walnut trees at Mount Vernon, the home of Washington, that have been so much sought after. In this way, and by giving talks to teachers and school children, or other associations, in connection with the plantings, people can be interested.

(e) More women should become interested in nut growing and the association. This has been made the subject of a special letter of which a copy is enclosed.

(f) A systematic campaign should be made to enlist the interest and co-operation of school teachers. The members of the association, men and women, almost every one, must have a tie, more or less close, with some school, or more than one, where he could get the interest of the teachers, if he would. Offer trees or nuts to plant, with a little ceremony, or stage a little talk with object lessons in nuts.

Probably an illustrated article in some paper or journal that is published especially for teachers would reach the largest number.

Direct circularising of teachers seem like an impracticable undertaking with the present resources of the association, but there are teachers' institutes in summer that could be reached, either by circularising the heads or by giving lectures at the institutes, or by publication in institute bulletins. There are also the state departments of education to which an appeal could be made.

Undoubtedly one of the most effective ways of reaching teachers would be by giving illustrated lectures wherever opportunity offered. At one time the secretary gave a number of such lectures for the New York City Board of Education. By means like these, which plainly mean much work, good results could unquestionably be obtained among teachers and, through them, among our ultimate objects, the children, tomorrow's producers and consumers.

(g) Establishing a nursery for the growing of approved varieties of nut trees and their distribution under suitable conditions as object lessons. This object can best be attained at the present time through the nut nurseries already established, through some form of agreement or subsidy, as soon as funds become available. It would be difficult for the association or for any one to do more in the way of nursery development of nut trees than has been done already by the nurserymen connected with our association. Attention is again called to the premium offer of Mr. Jones.

(h) Influencing other states to pattern after Michigan in enacting legislation for the roadside planting of nut trees. A committee was appointed at the twelfth annual convention at Lancaster in 1921 for this purpose, whose report may be found on page 59 of the report of the proceedings of that meeting. It there laid down for itself a definite course of action, and asked to be instructed to take such action, which was unanimously voted. But as yet no action has become audible or visible.

(i) The annual reports of this association, the American Nut Journal and Dr. Morris's book on Nut Culture, ought to be in every agricultural institution in the country. How better could any advocate of nut growing use a hundred or two hundred dollars, if he has it to spare above what he intends to take into the next world with him, than by putting these publications into a hundred agricultural institutions of learning? Better still if he could get these institutions to become paid annual members of the association and subscribers to the journal. This would be a splendid help to nut growing. In this we would pattern after the American Pomological Society.

(j) It has been suggested that Chambers of Commerce be interested in nut growing. That sounds very promising for they have the reputation of being the ideal hustlers. Those who have knowledge of the ways of chambers of commerce may be able to interest some and then report the event and the methods used to the secretary.

(k) "Selling" memberships in the association by the familiar rules laid down in Y. M. C. A. courses in salesmanship is a suggestion that may make appeal to those who have abilities that way.

(l) Making Christmas or birthday or any time gifts of a membership in the association with subscription to the American Nut Journal, or Dr. Morris's book on Nut Culture. The only requirement is this reminder and a few dollars to spare for humanity.

(m) Dr. Morris has for years tried to interest the Boy Scouts by offering prizes. He has a standing offer of \$5 to any boy scout or girl scout, campfire girl, or member of similar organization, who wins one of our nut prizes. Strange to say, although this offer has stood several years, Dr. Morris has never been called upon to pay this special prize. This year Dr. Morris offers another special prize of 10 years subscription to the Nut Journal, and membership in the association, to any boy scout who will win it. The conditions for winning this prize have not been formulated and suggestions are in order. This is a splendid chance for anyone who is connected with a band of boy or girl scouts to start a beneficent circle.

(n) Vice-presidents and members are asked to take the report of the last Lancaster convention and read the address of Dean Watts on page 80. In it he offers the facilities of the Pennsylvania Agricultural Experiment Station to carry out suggestions of our association and asks that the association make out a suggestive programme for the agricultural colleges of the states.

What can I do to arouse the sense of obligation of the state vice-presidents and other members of the association? If you would each add only one new member that would increase the membership by over three hundred. Can't you each get one new member, at least? Make it two and we shall have the thousand that the president asks for.

Won't you look over the suggestions and see if you cannot organize a state society, give some talks, write some articles, get some teachers, schools or clubs interested, or work out some plan of your own? Can't you come to Washington next year, Sept. 26, 27 and 28, and talk it over with the rest of us? If you just can't come will you write the secretary a long letter and tell him what you think about him and our aims and accomplishments?

W. C. DEMING Secretary

THE PEANUT

THE 1922 PEANUT CROP IN CHINA

From F. H. Kreis, American Consulate, Shanghai, China, February 7, 1923.

While peanuts are grown to a greater or less extent in every province of China, the great producing centers are Shantung, Honan, Chihli, Kwangtung, Manchuria, including Kwangtung Leased Territory, and Northern Honan. About half of the yearly crop is consumed in China, while the other half is available for export, either as peanuts or peanut oil.

Except in the territory adjacent to Swatow in Kwangtung Province, the 1922 peanut crop in China was good. The city and surrounding country were visited by a destructive typhoon and tidal wave during the early part of August, last year, which destroyed, it is estimated, about one-half of the peanut crop. It is believed, therefore, that the peanut crop in Swatow will not exceed 20,000 tons. Even in normal years, there is never in this district a surplus of peanuts available for export. On the other hand, considerable quantities of peanut kernels are imported into Swatow, where they are crushed and the oil shipped to the Chinese living in other portions of South China and the South Seas.

The indications are that the 1922 peanut crop in Shantung will amount to approximately 320,000 short tons, of which 60 per cent will be available for export, either as peanuts or peanut oil. It is probable that about 44,000 tons of peanut oil will be exportable from Tsingtau during 1923 from the 1922 crop, and that 16,500 tons of shelled Shantung peanuts will be sent from Tsingtau to the United States during 1923.

A survey of available information shows an estimate of 445,000 tons for the 1922 peanut crop of all China. Of this amount, at least 50 per cent is available for export, either as peanuts or peanut oil, while the probable exports to the United States during 1923, from the 1922 crop, will be 17,010 tons of shelled peanuts and 530 tons of unshelled nuts. [Note increase over estimated 365,000 tons in report of January 24, 1923.]

Under date of April 4th, the United States Department of Agriculture reported local prices and conditions in shipping sections:

Virginia-North Carolina Section: Receipts of Virginia farmers' goods have been very light during the past week. Supplies in the hands of farmers and country merchants are at a very low level, and those having small holdings are generally waiting in anticipation of a higher market. Cleaners are said to be buying a little more heavily during the past few days. Delivered prices are quoted to range 6-6½¢ for Runners, 6¼-6½¢ for Bunch, and 7-7¼¢ for Jumbos. Spanish farmers' goods are being sold lightly at \$2.25 per bushel delivered.

Southeastern United States: Nominal quotations received of \$150 per ton for farmers' grade Spanish and \$100 per ton for farmers' Runners, but practically no farmers' goods are left except in the hands of shellers. Demand continues good for peanuts for planting purposes.

Southwestern United States: The market for shelled peanuts is reported as rather quiet, but with the price holding distinctly firm. Spanish No. 1 is quoted at 11¼-12¢ per lb. and No. 2 at 10½¢. Most shellers are said to be closed down for the season. Crude peanut oil is quoted at 14¢ per lb., f. o. b. shipping points in buyers' tanks.

Seattle, Wash.: A little more activity is manifested on future shipments. Buyers bidding as follows: 30-32 to ounce, \$5.25 per cwt. for April shipment from Orient, cost, insurance and freight in bond to Seattle, duty not paid; 38-40s, \$4.75. Interest also shown in shipments afloat and nearing port. Imports at Tacoma during week ending March 31, 7,500 lbs., unshelled.

San Francisco, Calif.: Market very quiet. Very few sales. Heavy arrivals expected and buyers apparently waiting to get prices on resales. Few sales to brokers as follows: 28-30s, \$6.25-6.30 per cwt.; 30-32s, \$5.60-5.70 per cwt.; 38-40s, \$4.90 and \$4.95 per cwt., cost, insurance and freight to San Francisco, in bond, duty not paid. Imports March 27, 428,800 lbs. shelled; March 28, 60,000 lbs. shelled, 3,000 unshelled, 250 gallons (1,875 lbs.) peanut oil; April 3, 25,000 lbs. shelled.

The American Nut Trade: Market and Crop Reports

PERSIAN WALNUT

Budded Walnuts the Choice

The best walnut to buy, according to Carlyle Thorpe, general manager of the California Walnut Growers' Association, is the budded walnut. It costs a trifle more than the other grades, but it is worth considerably more, he points out.

"One pound of budded nuts will crack out a greater weight in walnut meats than any other grade on the market," says Mr. Thorpe. "For \$1 any consumer will get a greater value for his money if he calls for budded walnuts. Their meats are plumper, their shells thinner and their flavor better."

The walnut industry of California is growing at the rate of about 500 acres a year, and nearly all of the new plantings are of the budded varieties, which indicates that the budded type, which is already popular with the trade, is going to be a great deal more popular in the future. The grower would not plant budded walnuts if they weren't the best thing in sight.

Walnuts In Napa County, Cal.

The growing of walnuts for the market has flourished in Napa County and brought constantly increasing revenue to the producers.

Napa's product has stood out as first class for years and captured the first prize at the Panama-Pacific International Exposition, with an exhibit from the modern 220-acre orchard of John H. Wheeler, on the outskirts of St. Helena.

In 1922 the number of bearing walnut trees had increased to 48,600. Plantings are increasing steadily, and the non-bearing trees now within the county number 20,860, which will eventually increase the output 40 per cent.

In the bottom lands of Napa County, especially adapted to walnut orchards, the California black walnut trees were first planted. After they reach the age of seven to nine years they are grafted to English walnuts, and after three more years come into good bearing. The favorite commercial varieties are the Concord, Franquette and Eureka. At 20 years of age a walnut orchard approaches the peak of production, which may continue for an indefinite number of years with care and attention. At that age an acre on the best soils planted to walnuts produces a ton of nuts. Less favored districts and soils produce 1,000 pounds.

BLACK WALNUT

Walnut Planting Urged

For many years the walnut tree has been associated with war-making and this fashionable wood was seized for the use of fighting men of long ago, just as more recently the Kaiser seized it.

Most collectors of old furniture know that walnut was the fashionable wood under William and Mary and also under Queen Anne. Till the end of the reign of James II, all British dining tables were made of oak. Mahogany became the material for fashionable furniture under George I. But it is not so commonly known why walnut, that beautiful and durable wood, so fashionable from 1689 to 1710 or so, went so quickly out of use. Why was "the Reign of Walnut" so brief?

A historian of Marlborough tells us that all the walnut trees in England, and all the then existing English walnut timber was commandeered by the Horse Guards in Marlborough's day to be made into muskets, which the English soldiers carried at Blenheim, Ramillies, Oudenarde and Malplaquet. This gives added historical interest to the report of Charles Lathrop Pack, President of the American Tree Association of Washington, D. C., who says that all of the walnut trees in Belgium had by 1915 been looted by the Germans and sent to Essen and Aix to be made into gunstocks for the Kaiser's infantry.

In the United States during the World

War our own government bought large amounts of black walnut for gunstocks. These purchases largely contributed to the growing scarcity of walnut trees. The American Tree Association says walnut and butternut trees are a profitable timber crop on suitable soil, and advises large and small plantings. Formerly these trees were common over a large part of the country. Walnut lumber now commands high prices.—New York Times.

Black Walnuts For Iowa Highway

Fertile, Ia., Feb. 27.—The movement for the planting of nut-bearing trees along the highways of Iowa is meeting with the hearty indorsement of abutting land owners on the Scenic Route between Fertile and the State Park at Pilot Knob, and plans are already under way for the extensive planting of black walnut trees along the popular stretch of highway with the advent of spring.

In the opinion of conservationists and nature lovers of north Iowa, a more fitting and appropriate tree could not have been chosen for an avenue leading to the state's new play ground. Tall, austere and spreading of bough, it will add to the picturesqueness of the rolling hills through which the Scenic Route extends, and will be in keeping with the dignity of Pilot Knob, the highest point of elevation in the state.

Louis Treyve, Trevoux, France, writes that he has a process for grafting the root of *Juglans nigra* which results in avoiding diseases of the walnut in that country. Exhibits of his work at the Lyon fair last October received highest commendation. He is in correspondence with Dr. Robert T. Morris, of the Northern Nut Growers Association.

BRAZIL NUT

With estimate of the new Brazil nut crop being radically reduced, the situation has undergone a complete change, and the market is now in very strong position, said James W. McGlone, local importer, in the New York Commercial.

"After carefully checking reports being received by my correspondents at Manaus and Para from the interior of Brazil, concerning crop prospects, they advise that it seems assured that the 1923 crop of Brazil nuts will not exceed 23,000 tons, instead of 34,000 tons as earlier estimates indicated," he said.

"It is not unusual at this season of the year for the receivers at the shipping ports to cause the circulation of reports indicating short crops, consequently it is necessary to check independently on such reports, and this my correspondents have done before revising their estimates. Others have received reports indicating that the crop will not exceed 20,000 tons. If it is ultimately confirmed that the 1923 crop is only 23,000 tons, it will mean a reduction of fully 35 per cent. below the quantity received last year. It must be remembered that the 1922 crop, which amounted to 34,000 tons, was the largest ever harvested, but it is well, also, to keep in mind that the consumptive demand was sufficient to completely absorb the whole crop, and practically none were carried over.

"The main feature contributing to the reduction in the crop this year is the sharp advance in the rubber market. Brazil nuts and rubber are grown in the same districts along the rivers tributary to the Amazon, and the rubber market during the past two or three years has ruled very low. At this time last year best grades of Brazilian crude rubber were selling at around 17c per pound, as against the present market for best grades of Para rubber which is above 35c a pound, consequently a large part of the labor which during the past few years has devoted its energy to gathering the Brazil nut crop will be diverted to rubber, since at around present prices, taking into

consideration the low Brazilian exchange, rubber is realizing as much if not more in Brazilian currency as was realized during the pre-war period.

"While there seems no immediate prospect of a sensational advance in the price of Brazil nuts, nevertheless the article will intrinsic value, Brazil nuts should appear bear close watching. From a standpoint of attractive at around present prices, say 7½c for mediums and 9½c for large, washed, as compared with other unshelled nuts, especially since the improved methods employed in caring for the crop has resulted in quality running uniformly better—few lots arriving cracking over 10 per cent bad."

THE PECAN

At Milledgeville, Ga.

Sam C. Patterson, general manager of the Milledgeville, Ga., Nursery Co., said recently: "We planted 4,000 pounds of pecan nuts this spring, giving us one of the largest, if not the largest, exclusive pecan Nurseries in Georgia. This section of the South is particularly suited to the pecan. We have no diseases to fight, thus far. Have never had to spray; we have some of the oldest trees of the leading varieties. My 20-year-old 65-acre grove has never had a spraying outfit in it. We get good crops of perfect nuts, which command the highest prices. Practically our entire output of pecan trees for next season has been sold; most of them will be planted within 50 miles of Milledgeville."

San Saba Pecan Prizes

E. E. Risien & Son, San Saba, Tex., won the first prize for the largest pecan; first prize for the best jar of improved pecans on all around points and first, second and third prize in the class for the best jar of improved pecans judged according to official standard, at the exhibit of San Saba county pecans judged by officials of the A. & M. College, at College Station, Tex.

The high winner on percentage of meat was the new pecan of E. E. Risien & Son, which was entered as "Improved Unnamed," and which graded 71% of meat, this being a world record so far as known. The official name of this pecan in future has virtually been decided, and will be henceforth known as "Pecan Supreme," that name having previously been registered for the new pecan food product developed by A. W. Woodruff of the San Saba Pecan Company. E. E. Risien & Son contributed their entire winnings in the pecan exhibit of the San Saba Chamber of Commerce for 1922 to the pecan committee of that organization to be used for advancing interest in pecan propagation in San Saba county, or for such other purposes as the committee might decide advisable.

Texas Pecan Crop Threatened

A. I. Fabis, in charge of pecan insect investigations and entomologist of the Federal Station, Brownwood, Tex., said last month that the pecan crop of the entire Central West now is threatened with the caseborer, one of the most destructive pecan pests known to the Department of Agriculture.

Mr. Fabis made minute investigation over a large area and reported billions of the caseborers, which have hibernated on the pecan trees ready for operation on the pecan buds. There will be three generations of the insect, he says, the first generation attacking the buds and depositing eggs, the next attacking the young pecans and the last attacking the larger size nuts.

Mr. Fabis sent warnings throughout the entire pecan area, and advised owners of pecan-bearing timber what to do. He advised immediate steps to destroy the pests.

2,000 Acres Set to Pecans

A very interesting project is now virtually completed at Monticello, Fla.—the planting of 2,000 acres in pecans on the land of the Bellamy Pecan Groves Company. The work

has been in progress about two months, 175 hands being employed, and the completion of the task was marked by a big barbecue given by the company to its employees. The trees planted on this tract are Schleys, Moores, Moneymakers and Pabst. These trees when given attention for eight years will begin to bear.—Thomasville, Ga., Press.

To the Ladies

Longview, Tex., April 4.—The Ladies' Club with a fine program put out 100 pecan trees recently on the Jefferson highway, in memory of the men who fought were wounded and died in the great war. Trees will be put all along through the county.

San Saba Pecans Win

First honors were taken by San Saba County's exhibit of pecans at the Southwestern Exposition and Fat Stock Show at Fort Worth. This exhibit has been pronounced by officials of A. & M. College, "the greatest exhibit of pecans ever displayed in one collection."

John W. Pace, Haskell, Tex., writing to a Dallas newspaper, says: "I do not think you could devote your valuable space to a better purpose than to insist on the citizens of this state planting pecans instead of hackberry and other trees." The newspaper editor agrees with him.

An article on "Quick Results in Pollinizing Pecans," by E. E. Risien, noted pecan pioneer, Texas, was published some time ago in the American Nut Journal. It has been reprinted, and copies are available at 10 cents each at the office of the Journal.

St. Louis pecan shellers have been asking 91c a pound for selected halves in barrels, 83c for selected pieces and 70c for brown pieces, f. o. b. These prices are for prompt shipment or on contract.

H. W. Walpole, Harrison, Ark., has purchased 1,000 propagated pecan trees for \$1,000 and planted them on the Carnahan land, on Mill Creek.

Just mention AMERICAN NUT JOURNAL

THE PINON NUT

We believe that Mrs. Fannie S. Spitz, Albuquerque, N. M., is in pronounced degree a benefactor of the Nut Industry, in that she has invented and put into successful practical operation a machine for cracking nuts which could only be cracked by hand—nuts which no other appliance would crack satisfactorily. As such she is entitled to high praise and the gratitude of the public generally and of growers and handlers of nuts especially, and is entitled to every consideration in connection with the subject.

We have learned of correspondence between Mrs. Spitz and the superintendent of the plant and equipment department of a large nut growers co-operative association on the Pacific coast, in which scant courtesy to the inventor and owner of the nut-cracking machine was accorded. A few weeks ago the superintendent referred to politely asked for price and descriptive data on the nut-shelling machine, requesting that the information be sent to a post office box by the inventor and owner was courteous in the extreme and the information sought was accorded fully. The superintendent's reply is characteristic of the sort of men employed by large corporations to endeavor to obtain as nearly gratis as possible that which may prove of great advantage where ample capital is available, and with little or no regard for the interests of the inventor and owner. The typical corporation chatter of superiority when dealing with one whose wealth in brain power stands out in marked contrast to the temporary power of a few dollars, is manifest in the association superintendent's reply: "We are inclined to believe that your sheller will prove a heritage to coming generations if you maintain in your present attitude with reference to same."

The invention, without doubt, will prove a "heritage to coming generations," but not in the sense intended.

When one asks for the return of large investments and six years of unceasing toil and self-denial in the production of an appliance the economic value of which has

been estimated by experts in seven figures, it is surely a privilege well earned, and in no sense is the sarcasm of an employee in a marketing concern warranted.

The lack of appreciation of inventive genius is too common and we take occasion to spike this instance, to stamp it with its true character and to place it on record on the plane where it belongs.

Prizes for Nut Tree Planters

Here is what M. M. Kaufman, Clarion, Pa., a member of the Northern Nut Growers' Association is doing to advance nut culture.

WALNUT PLANTING CONTEST

On April 15th, 1921, Mr. M. M. Kaufman, of Clarion, gave approximately one hundred walnut trees to the pupils of the Junior High School to be planted and cared for. Prizes were to be given each year to those five pupils whose trees show the greatest care and attention. Last year, after one season's growth, the five prizes were awarded and it is planned to award these prizes shortly for 1922. For this purpose it is desired that all those who received these trees submit a sketch of the property on which these trees were planted and submit these sketches to the District Forester, Charles E. Zerby, who will make an inspection of the trees and make recommendations to Mr. Kaufman, who will grant the prizes. The prizes are \$5.00, \$4.00, \$3.00, \$2.00 and \$1.00. Boys and girls who competed or won prizes last year are not barred, but all contestants must furnish a sketch showing the location of the trees.—Clarion, Pa., Republican.

Wonderful Business Opportunity

Extensive Expansion of the PINON-NUT-SHELLING INDUSTRY

MADE POSSIBLE BY THE F. S. S. SUNSHINE NUT SHELLING AND SEPARATING MACHINES. INAUGURATED AND ESTABLISHED SINCE 1917 MY MACHINES AND METHODS FULLY PROTECTED BY U. S. AND FOREIGN PATENTS. IF INTERESTED ACT QUICKLY.

IF IN DOUBT, ASK THE "AMERICAN NUT JOURNAL."

THIS INDUSTRY FOR SALE ON ACCOUNT OF OWNER'S HEALTH.

Propositions considered from parties able to give proper credentials and qualified to handle the enterprise.

Machines Available for Ultimate Purchaser

Logical location for expansion, Albuquerque, N. M., where climate and conditions favor the successful continuation of one of the most promising southwestern industries.

NO AGENTS. Address: FANNIE S. SPITZ

323 N. Tenth St., Albuquerque, N. M.

PATENTEE AND SOLE MANUFACTURER

A NEW BOOK! NUT GROWING

By Robert T. Morris

The latest and only up to date book on the newest and one of the most important branches of Horticulture, giving a broad survey of a rapidly growing industry. Detailed explanation of successful methods of propagation and the new process of grafting with the use of paraffin; illustrated.

An invaluable work for all nut growers.

Price, \$2.65, Postpaid

AMERICAN FRUITS PUB'G. COMPANY
39 State Street, Rochester, N. Y.

MEMBERSHIP DRIVE

National Pecan Growers Association
The National Pecan Growers Association fee for membership is \$2.00 per year, with a student membership fee of \$1.00.

The subscription price for the American Nut Journal, official organ, is \$2.00 per year.

Note combination offer below.

REGULAR YEARLY RATES

Association Membership.....\$2.00
American Nut Journal..... 2.00

SPECIAL YEARLY RATES

Association Membership } \$3.25
American Nut Journal }

Address J. Lloyd Abbot, Sec'y.
Route 1, Spring Hill, Ala.

American Fruits Company's Library Opportunities

PRACTICAL BOOKS ON HORTICULTURE, NUT GROWING, NURSERY PRACTICE

Any of the following books will be sent on receipt of price by AMERICAN FRUITS PUB'G CO.,
123-125 Ellwanger & Barry Bldg., ROCHESTER, N. Y. Prices subject to change.

American Apple Orchard By F. A. Waugh.....	\$1.90	Irrigation for the Orchard—Stewart	1.75	Plant Propagation; Greenhouse and Nursery Practice—M. G. Kains...	2.40
American Fruit Culturist By John J. Thomas.....	3.65	Land Drainage—Joseph H. Jeffrey..	2.15	Plant Physiology—B. M. Duggar....	3.00
American Fruit Farm—F. N. Thorpe	2.65	Landscape Gardening—Art of Land- scape Architecture—Parsons.....	3.65	Pomology, Text-book of—Gourley...	2.75
American Grape Culture—Munson..	2.65	Landscape Gardening—Downing's Famous Work—10th Edition— Revised by Waugh.....	6.00	Practical Forestry—A. S. Fuller....	2.15
American Grape Growing and Wine Making—George Husmann	2.15	Landscape Gardening—House and Garden's Book of Gardens, 9 1/2 x 12 1/2, 400 Illustrations.....	5.15	Practical Fruit Grower—Maynard...	1.00
American Horticultural Manual By Budd-Hansen, two vols....	3.30	Landscape Gardening—Kemp—Re- vised by F. A. Waugh.....	2.15	Practical Tree Repair—Peets.....	2.65
American Peach Orchard—Waugh..	1.90	Landscape Gardening—Maynard	2.65	Principles of Agriculture—Bailey...	2.00
Bulbs and Tuberous-Rooted Plants..	2.15	Landscape Gardening—The Small Place—By Elsa Rehmann.....	3.65	Productive Orchard—F. C. Sears..	2.65
Bush Fruits—By F. W. Card.....	3.15	Landscape Gardening—Cridland.....	2.65	Principles of Fruit Growing—Bailey	2.65
California Fruits and How to Grow Them—E. J. Wickson, A. M....	4.15	Landscape Gardening—The Com- plete Garden—Albert D. Taylor..	6.15	Principles of Pruning—Kains.....	2.65
Citrus Fruits—J. E. Coit.....	3.40	Landscape Gardening—O. C. Simonds	6.15	Pruning Manual—By L. H. Bailey...	2.65
Commercial Apple Industry of North America	3.65	Manual American Grape Growing— Hedrick	3.40	Putnam's Garden Hand Book.....	2.00
Cyclopedia of Hardy Fruits By U. P. Hedrick	6.20	Making Horticulture Pay—Kains....	1.90	Quince Culture—W. W. Meech.....	1.35
Dwarf Fruit Trees—Waugh.....	1.00	Manual of Fruit Diseases—L. R. Hessler, H. H. Whetzel.....	3.15	Roses—How to Grow—Robert Pyle..	1.35
Farm Bureau Movement—O. M. Kille	2.15	Manual of Fruit Insects—M. V. Slingerland, C. R. Crosby.....	3.90	Rose—H. B. Ellwanger.....	1.40
Fertilizers and Crops By Dr. L. L. Van Slyke.....	3.40	Manual of Gardening—L. H. Bailey..	3.40	Sales Promotion By Mail.....	2.15
Fertilizers—Edward B. Voorhees...	2.65	Manual Tropical and Sub-tropical Fruits—Popenoe	3.90	Small Fruit Culturist—A. S. Fuller..	1.75
Field Notes on Apple Culture By Dr. L. H. Bailey.....	.90	Manual of Tree Diseases—Rankin....	3.40	Soils—E. W. Hilgard.....	4.25
First Principles of Soil Fertility By Alfred Vivian.....	1.50	Manual of Vegetable Garden Insects By Crosby & Leonard.....	2.90	Soils—Lyon-Fippin-Buckman	3.40
Forests of N. Y. State—Recknagel..	2.65	Manures and Fertilizers—Wheeler..	2.65	Soils—F. H. King.....	2.40
Fruit Growing in Arid Regions.....	2.75	Modern Fruit Marketing—Brown....	1.90	Soils—By Charles W. Burkett.....	1.90
Fruit Garden—P. Barry.....	2.40	Modern Propagation Tree Fruits— B. S. Brown.....	1.65	Spraying Crops—C. M. Weed.....	1.00
Fruit Harvesting, Marketing—Waugh	1.90	Nature's Garden—Neltje Blanchan..	6.30	Standard Cyclopedia of Horticulture Edited by L. H. Bailey. In six vol- umes. 3,600 pages. 4,000 text engravings. 96 sepia halftones. 500 collaborators. May be had on installment payments.....	40.00
Fruit Insects—Crosby.....	3.90	Nursery Manual—Dr. L. H. Bailey...	2.65	Strawberry in North America—S. W. Fletcher	1.90
Fumigation Methods	1.90	Natural Style Landscaping—Waugh	2.65	Strawberry Growing—S. W. Fletcher	2.40
Gardening for Pleasure—Henderson..	2.15	Nut Culturist—Andrew S. Fuller....	2.15	Success in the Suburbs—John R. Mc- Mahon	2.15
Gardening for Profit—Henderson....	2.15	Nut Growing: Latest Information; Guide to Propagating—By Rob- ert T. Morris.....	2.65	Successful Fruit Culture—Maynard	1.75
Grape Growers Guide—Chorlton....	1.65	Old Time Gardens—Alice M. Earle..	2.65	Surgeon's Philosophy—Dr. R. T. Morris	3.15
Grape Culturist—A. S. Fuller.....	2.15	Ornamental Gardening—E. A. Long..	2.15	Systematic Pomology—Waugh.....	1.90
Greenhouse Construction—Taft.....	2.40	Principles of Floriculture.....	3.40	Ten Acres Enough—I. P. Roberts...	1.75
Greenhouse Management—Taft.....	2.40	Parsons on the Rose—Parsons.....	1.75	Wild Fruits, How to Know—Peterson	2.15
Hedges, Windbreaks, Shelters.....	1.00	Peach Culture—J. A. Fulton.....	1.65	Wind and Weather—McAdie.....	1.15
How To Grow Roses—Robert Pyle..	1.35	Peach Growing—By H. P. Gould....	2.65		
Injurious Insects—F. L. Washburn..	2.65	Pear Culture for Profit—Quinn....	1.35		
Insects of Economic Importance— Herrick	2.15	Picturesque Gardens—Henderson....	2.25		
Insect Book—Dr. L. O. Howard....	6.30	Plant Breeding—By Dr. L. H. Bailey	3.40		
Insects and Insecticides—Weed....	2.15				
Insect Pests of Farm, Orchard and Garden—Sanderson and Peairs..	4.65				
Insecticides and Fungicides.....	3.20				
Irrigation Farming—L. M. Wilcox...	2.40				

A paper which gives the best value for the money to the reader will give the best value to the advertiser as well. I don't think there is any argument about the soundness of this view.—H. Dumont, Chicalo, Ill., in Printer's Ink.

WANTED Names and Addresses of Owners of Groves of Native Nut Trees in Northern States.

In the interest of Northern Nut Culture this Journal desires the above information to serve as a basis for extension of Nut Culture.

Readers will confer a favor by sending us lists of names and addresses of those who have stands of nut trees on their property, (with some account of productivity if practicable). Black walnut, English walnut, butternut, hickory, chestnut, filbert, etc.

American Nut Journal P.O. Box 124 Rochester, N. Y.

BUDDED and GRAFTED Nut Trees

Start right with my hardy Pennsylvania grown trees and be assured of success. Attractive Catalogue Free.

I have this season a fine lot of stake trained Pecan, English Walnut, Black Walnut and Persimmon trees budded on root pruned transplanted stocks, that will please you and that will transplant easily and sprout. Write for catalogue.

J. F. JONES, The Nut Specialist
LANCASTER, PA.

THIS SPACE
\$2.50 Per Month Under Yearly Contract
Under less than yearly term:
\$2.80 Per Month

PECANS
We are the pioneer growers of budded and grafted pecans in the South. Have a complete stock of the leading standard varieties. Can furnish trees we know will please and give satisfactory results. Catalog free.
INTERSTATE NURSERIES
C. M. Griffing & Co. Props., Jacksonville, Fla.

Texas Pecan Nursery
Arp, Texas
THE PEOPLE THAT GROW WELL-ROOTED PECAN TREES

CONSULTING TROPICAL HORTICULTURIST and TREE EXPERT

HARVEY C. STILES CHOCOLATE BAYOU, TEXAS

Specializing in Pecans, Grapefruit, Avocados, and Landscape Development. Long experienced expert for—and present active director of—many such large projects throughout tropics and semi-tropics. Examinations, Reports, Plans, Specifications and Estimates. Correspondence suggested.

Have You Nuts to Sell?

HICKORY NUTS BLACK WALNUTS
BUTTERNUTS CHESTNUTS

Hundreds of buyers are asking where the nuts can be obtained in quantity. Place your Sale Advertisement in the AMERICAN NUT JOURNAL for quick returns. \$2.80 per inch.

39 State St., Rochester, N. Y.

American Nut Journal

DEVOTED TO NUT GROWING INTERESTS
GENERALLY THROUGHOUT THE AMERICAS

Vol. XVIII. No. 5

MAY, 1923

Per Copy 20c.

TREES

I think that I shall never see
A poem lovely as a tree.

A tree whose hungry mouth is prest
Against the earth's sweet-flowing breast;

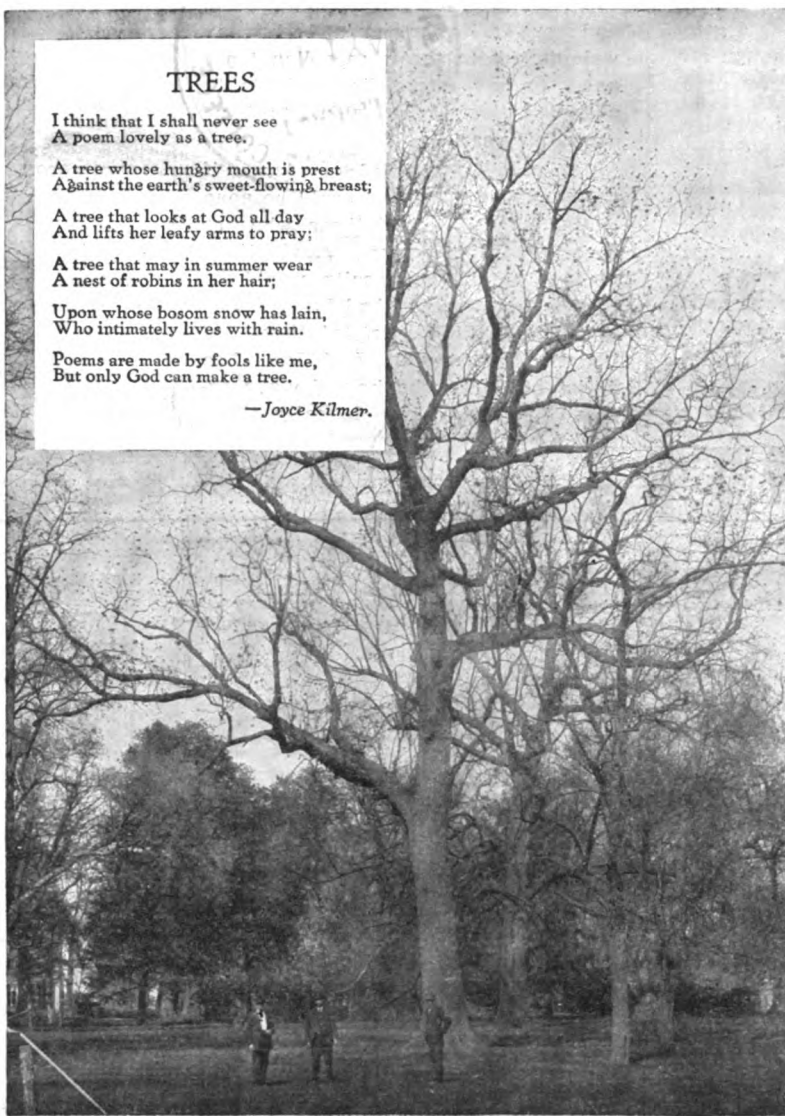
A tree that looks at God all day
And lifts her leafy arms to pray;

A tree that may in summer wear
A nest of robins in her hair;

Upon whose bosom snow has lain,
Who intimately lives with rain.

Poems are made by fools like me,
But only God can make a tree.

—Joyce Kilmer.



A FINE BLACK WALNUT TREE
Can Be Grown in Nearly Every State in the Union. A Grove of
These Trees is a Fine Asset

39 STATE ST.



ROCHESTER, N. Y.

American Fruits Publishing Co.

A BIG TEXAS PECAN ORCHARD

The big Capps Pecan Farm, near Brownwood, has an orchard of 425 bearing pecan trees, 32 years old, out of a total planting of 650 acres set out in 1890 by A. P. Swinden, shows all the excellencies and faults of the system under which the Texas pecan industry is laboring. For lack of essential research work done in Texas along breeding, variety, cultural and pruning lines, this great orchard presents a problem of utmost importance to every thinking pecan man in the state. As it is, growers who have come into possession of orchards planted many years ago, and which today should be producing profitable crops of pecans, find that by far the largest number of trees planted are not true to type and are not producing regularly, nor nuts of prime market value.

The Swinden farm was bought by William Capps, Fort Worth, Texas, three years ago. H. G. Lucas has been engaged to put it into commercial production. Many of the trees yield small nuts and others produce good nuts, but yield sparingly at a time when others are producing bumper crops. Still others fail to yield nuts at all, although all the conditions might be favorable to high yields. These vexing problems have to be gone into one at a time. It will require years of careful observation to reconstruct the orchard.

Mr. Lucas has established a set of books for the entire pecan orchard. The trees are numbered and each fifth row bears a painted tag, which enables the observer to know which tree he is working on and its record.

When Mr. Swinden planted the orchard there was no particular interest in domesticated pecans in Texas. The woods around Brownwood were full of wild pecans, many of surpassing size. The bottoms along the Colorado River and Pecan Bayou yielded large crops of pecans and there were so many trees that no one took the trouble to discover which trees bore regularly and

which were laggards. Things went along haphazardly.

There was one outstanding tree near Milburn in McCulloch county, known as the Post pecan tree, which ranchmen and early settlers for many miles around knew to be of unusual excellence, both in size of nuts and flavor. Mr. Swinden collected many wild nuts of this tree and planted them, four or five to a hill, in rows forty feet apart. Nuts from the Southeastern States and other parts of Texas also were planted. As the nuts sprouted, the most vigorous saplings

DR. DEMING'S MARKED SUCCESS

Secretary W. C. Deming, Northern Nut Growers' Association, says of his Georgetown, Conn., nut orchard:

"Last fall I had several quarts of the finest shagbarks from my grafted trees and several quarts of fine chestnuts and chinkapins, and I am now determined to bring them to the next meeting and show the first fruits and the possibilities. I expect to get more and more each year now, and when my walnuts get to throwing pollen I am going to have some fine walnuts to show. I think I am going to have some this year.

"As for plantings of nut trees, if the files of the Journal could be gone over and a list of all those who are reported to have acreage plantings made I think the results would be surprising. I wish I had kept such a list, but I think most of them are listed in the Journal. J. F. Jones has a list of those who have bought extensively from him. I really think such a list would be most inspiring."

were allowed to grow, in the hope that they would reproduce true to the type of the parent nuts, which were of a large size and practically papershell quality. The soil on which this orchard was planted is exceedingly rich, being alluvial in character. The rows were laid out by a surveyor with great care and the trees stand as uniform as soldiers on parade.

In a dozen years or more, after the trees came into bearing, it was found that practically all differed greatly from the parent trees. There were round nuts, long, thin, wedge-shaped nuts, "peaked" nuts and a few, scarcely 2 or 3 per cent out of all the 650 acres of trees, which resembled the original Post pecan. This was disappointing and led to the neglect of the great orchard, because its owners at that time did not know what to do to correct the trouble.

After changing owners several times the orchard now has fallen into possession of men who are willing to struggle with the problem which confronts them. Mr. Lucas at once got into communication with Dean E. J. Kyle, of Texas Agricultural and Mechanical College, himself a pecan enthusiast and authority. Later Prof. Fred R. Brison, of the College, visited the orchard and assisted Mr. Lucas in budding and "top-working" the trees, which, it was reasonable to assume, were off type.

In most cases the buds have made a healthy growth, and will come into commercial bearing in a few years. Frotcher, Delmas, Stuart and other papershell varieties have been worked into the pecans, and pecan growers of Texas are watching the experiments with much interest.

A large artificial lake has been built, which will store water for irrigating the big orchard as it may require.

The Capps pecan orchard produced about 100,000 of nuts in 1919, selling at 10 cents to 11 cents a pound. This was the premier pecan year of the whole South. In 1921 the yield was 25,000 pounds, which sold at an average of 23 cents a pound. The large trees produced an average of 150 to 200 pounds of nuts.

Just mention AMERICAN NUT JOURNAL.

FOR SALE

\$125.00 per Acre

144 Acres 3 miles north of city of Brownwood, Texas, located on pike road and Pecan bayou. 80 acres in high state of cultivation, 40 acres subject to irrigation, ideal for alfalfa. Good improvements. Guarantee 500 bearing pecan trees and about same amount not. These pecans are high grade paper shell variety. Some trees have produced 800 lbs. to the tree.

If you are looking for a real bargain, now is the time to get busy.

T. W. POSEY, Owner

Box 179 Brownwood, Texas

PECAN TREES

100,000 TREES—STANDARD VARIETIES
WE GROW NOTHING BUT PECAN TREES
HIGH QUALITY—SERVICE THE BEST

SIMPSON NURSERY CO., MONTICELLO, FLA

THIS SPACE

\$2.50 Per Month Under yearly Contract

Under less than yearly term:
\$2.80 Per Month

FOR SALE
5 ACRE PECAN GROVE LOCATED IN THE UNITED PECAN GROVES AT PUTNEY, GEORGIA. TREES PLANTED 9 YEARS AND IN GOOD CONDITION—UNDER CARE OF PAPER SHELL PECAN GROWERS ASSOCIATION.
PRICE, \$2,500—A BARGAIN FOR QUICK SALE. ADDRESS G. E. HADDEN, #016 HAYES AVE., LOS ANGELES, CALIF.

**Budded and Grafted
HARDY NORTHERN NUT TREES**
Best varieties, grown in natural nut soil. Send for catalog. Have your seedling nut trees topworked to these fine varieties.
Information and estimate on request.
INDIANA NUT NURSERY
Rockport. J. F. Wilkinson, Prop. Indiana



NEW EDITION FREE

A practical guide showing how to bud pecans. Tells how to grow trees 12 inches in diameter by the end of the 8th year, which yielded 400 lbs. nuts per acre.

Trees, Nuts, Groves for sale direct without agent at attractive reduced prices
B. W. STONE, Thomasville, Ga.

ORCHARD OWNERS OF THE SOUTH-EAST AND GULF STATES

Reports furnished on pecan and fruit orchards, giving variety, age, size and condition of each tree; also notes on general conditions and needs of orchards. Care and management of orchards a specialty.

HORTICULTURISTS INCORPORATED
6th Floor, Exchange Bank Building
Albany, Ga.

PECAN TREES

We Grow Them Right
We Pack Them Tight
We Price Them Right

Southern Nut Tree Nurseries,
THOMASVILLE, GA.

SUCCESS

and other leading varieties. Also citrus
BECHTEL PECAN NURSERIES

Ocean Springs, Miss.

PECAN TREES

Plant them this year! Buy direct from nursery and save agent's profit. All standard varieties; quality and service the best. Write us for prices.

FLORIDA NURSERIES

W. W. Bassett, Prop., Monticello, Fla.

AMERICAN NUT JOURNAL CHIEF EXPONENT OF AMERICAN NUT INDUSTRY

Of National Circulation

Covering Every Phase of Nut Culture

Subscription:
Advertising:

\$2.00 Per Year
\$2.80 Per Inch

Official Journal

{ National Pecan Growers Association
Northern Nut Growers Association

AMERICAN FRUITS PUBLISHING COMPANY

39 State Street, Rochester, N. Y.

AMERICAN NUT JOURNAL --- MAY, 1923

EDITORIAL DEPARTMENT—Communications on any subject connected with Nut Growing and Distribution are cordially invited by the editor; also articles on this subject. We shall be pleased to reproduce photographs of trees of interest, methods and scenes connected with the Nut Industry; portraits of individuals, etc. Suggestions are cordially welcomed.

ADVERTISING—Advertising forms close on the 10th of each month. If proofs are wanted, copy should be in hand on the 1st.

Advertising rate: 20 cents per square line; \$2.80 per column inch for any amount of space.

Advertisements that do not represent reliable concerns will not be accepted.

SUBSCRIPTIONS—The "American Nut Journal" will be sent to any address in the United States for \$2.00 a year; to Canada or abroad for \$2.50 a year. Three years: In United States, \$5.00; Canada, \$6.50.

Add ten cents for exchange unless bank draft, express or postal money order is used.

WHAT THIS JOURNAL STANDS FOR—Reliable information on all phases of the Nut Industry. It is for the advancement of Nut Growing in general; it is in no way confined to the interest of a particular kind of nuts, nor of a particular section. It is broad in scope and absolutely independent. The aim of "The American Nut Journal" is to stimulate thousands of persons into developing interest in one of the greatest food supplies of the future—to line the roadsides and fill the waste places with trees of a sort which yield dollars worth of fruit every year instead of the mere bunches of leaves resulting from present shade and ornamental planting. At the same time it will record the progress of the industry, the latest descriptions in the note book of the biologist and plant physiologist, the rapidly expanding knowledge of methods, the increasing acreage, and in short the news as it develops of an industry whose importance is recognized by an increasing number of persons in all sections.

Entered as second-class mail matter June 6, 1914, at the post office at Rochester, N. Y., under the Act of March 3, 1879.

AMERICAN FRUITS PUBLISHING COMPANY INC.

Ralph T. Olcott, Editor and Manager

121-123-125 Ellwanger & Barry Bldg., Rochester, N. Y.

Classified Business Announcements In This Issue.

Bassett, W. W. Pecan Trees	58	"Nut Growing" New Book	67
Bechtel's Pecan Nurseries... Grafted Pecan Trees.....	58	Nut Information Special Topics	59
Florida Nurseries Pecan Trees	58	Nuts as Staple Food..... Dr. J. H. Kellogg.....	59
Griffing & Co., C. M. Pecan Trees	68	"Nut Trees for the North". Expert Advice	59
Hadden, G. E. Pecan Grove for Sale.....	58	Posey, T. W. Special Announcement	58
Horticulturists, Inc. Southern Pecan Experts.....	58	Simpson Nursery Co. High Grade Pecan Trees.....	58
Indiana Nut Nursery..... Northern Pecan Trees.....	58	Southern Nut Tree Nurseries Pecan Trees	58
Inter-State Nurseries Pioneer Pecan Growers.....	68	Stiles, Harvey C. Tree Expert	68
Jones, J. F. Grafted Pecan Trees.....	68	Stone, B. W. Pecan Trees, Nuts, Groves.....	58
Lancaster Nut Nurseries... Northern Nut Trees.....	68	Texas Pecan Nursery Budded Pecan Trees.....	68
Logical Market Place..... For Selling Nuts.....	67	Wanted Names of Grove Owners.....	68
Northern Nuts Sources Wanted	68	Wilkinson, J. F. Grafted Pecan Trees.....	58

IMPORTS OF NUTS INTO THE UNITED STATES, FOR CONSUMPTION, DURING THE LAST THIRTEEN YEARS

(Compiled by Bureau of Commerce and Navigation, Department of Commerce, Especially for the "American Nut Journal.")

KIND	1909	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919	1920	1921
Almonds—not shelled..... lbs.	2,120,632	6,810,056	3,762,654	5,242,563	2,363,860	5,501,059	4,684,594	2,368,369	4,901,168	6,149,374	7,482,538	6,460,732	5,068,215
Shelled..... lbs.	8,538,054	10,485,750	12,160,636	11,682,988	12,635,057	13,896,621	12,163,153	13,210,668	19,180,258	21,444,757	28,007,808	18,789,626	21,572,634
Apricots and peach kernels lbs.	27,854	13,551	7,939	18,769	18,572	67,164	11,926	250,075	2,353,560	2,490,368	\$ 4,055,282	\$4,236,221	\$2,263,000
Coconuts in the shell..... Dollars	\$1,246,463	\$1,238,970	\$1,704,262	\$2,012,203	\$1,783,713	\$2,150,500	\$1,593,666	\$1,891,328	\$2,353,560	\$2,490,368	\$ 4,055,282	\$4,236,221	\$2,263,000
Coconut Meat broken or Copra not shredded, dessicated or prepared..... lbs.	23,742,518	20,830,539	38,081,984	61,505,787	34,283,592	44,459,158	88,690,382	108,507,765	247,043,127	430,649,332	258,637,781	215,198,461	189,320,950
Dessicated, shredded, cut or similarly prepared..... lbs.	5,461,602	5,985,308	6,861,850	5,386,465	6,826,095	9,307,924	5,866,806	7,947,380	10,491,796	20,269,909	29,637,674	30,631,022	35,633,497
Cream and Brazil..... bu.	409,644	461,496	277,679	21,601,008	11,933,139	11,431,531	21,483,319	12,489,217	16,230,023	11,282,088	43,076,338	13,035,436	37,102,046
Filberts—not shelled..... lbs.	7,365,837	10,026,961	10,084,987	8,375,860	8,586,278	10,365,072	10,922,248	10,003,552	16,468,547	7,432,524	16,747,348	14,865,364	14,092,336
Shelled..... lbs.	1,384,689	1,413,381	2,332,606	1,368,835	1,450,620	1,798,147	1,722,705	1,289,540	2,280,757	4,245,863	3,778,806	4,711,283	4,233,187
Marrons, crude..... lbs.	10,270,398	9,968,879	14,845,345	10,157,321	18,849,237	12,549,959	15,754,796	6,275,030	5,021,146	29,484,637	23,340,866	15,264,069	15,264,069
Olive nuts, ground..... Dollars	\$580	\$478	\$236	\$206	\$342	\$395	\$23	\$112	\$420	\$1,104,885	\$626,435	\$16,905,313	\$5,610,056
Palm and Palm Nut kernels..... lbs.	\$2,752	\$6,907	\$5,744	\$7,970	\$4,872	\$21,127	\$31,800	\$1,104,885	\$626,435	\$16,905,313	\$5,610,056	\$8,339,034	\$230,194
Peanuts or Ground Beans..... lbs.	7,326,371	11,297,172	11,055,823	12,660,433	12,140,612	17,298,778	14,075,387	9,623,411	7,710,082	1,970,797	5,667,354	7,222,486	4,893,677
Unshelled..... lbs.	1,302,919	16,080,919	7,821,505	3,127,829	7,823,173	21,819,101	11,686,507	18,739,888	27,548,928	67,746,831	24,179,687	103,562,486	39,406,853
Shelled..... lbs.	1,480,280	3,349,460	2,333,037	2,607,277	1,803,434	2,621,161	2,032,539	1,265,382	4,076,333	1,265,382	2,194,680	1,082,360	1,082,360
Pecans..... lbs.	17,432,885	23,289,974	21,146,116	22,208,845	16,363,046	16,134,211	20,888,326	22,610,418	17,177,892	3,304,003	21,235,078	17,339,096	31,821,639
Walnuts—not shelled..... lbs.	8,781,906	10,960,968	11,244,054	10,713,286	10,083,622	11,636,053	10,552,856	13,445,790	12,257,583	9,707,401	10,260,869	13,972,917	15,264,069
Shelled..... lbs.	9,938,337	3,584,544	2,982,663	3,050,989	3,600,056	7,426,313	3,272,492	2,772,589	2,769,634	2,772,589	2,769,634	3,763,973	3,890,676
All other shelled or unshelled, not specially listed..... lbs.	\$3,549,987	\$12,775,186	\$14,265,572	\$15,626,485	\$13,508,307	\$19,815,713	\$16,865,244	\$20,594,434	\$33,687,688	\$49,930,283	\$57,499,000	\$68,762,801	\$37,378,572
Total of nuts Imported Dollars													

Nut Culture Information

Reprint folders on topics discussed in American Nut Journal. 10 Cents Each

Grafting and Budding the Walnut—U. S. Dept. Agriculture.

Pecan Areas of the United States—W. P. Reed.

Walnut Trees For New England—Dr. Robert T. Morris.

Some Walnut Varieties—Dr. L. D. Batchelor.

Chip Buds For Nut Trees—Charles L. Edwards.

Grafting, Budding, Topworking—Dr. W. C. Deming.

Breeding Chestnuts for Disease Control—U. S. Dept. Agr.

Advent of Nuts As Staple Food—Dr. J. H. Kellogg.

Underworking Nut Trees—Charles L. Edwards.

The Ubiquitous Black Walnut—T. P. Littlepage.

Average Yield of Pecan Orchard in S. W. Georgia.

Value of Nuts As Food—Dr. W. C. Deming.

Improved Black Walnut a Good Investment—Henry Stabler.

Status of Pecan Industry—C. A. Reed, U. S. Nut Culturist.

Sources of Supply of Hazel Nuts—Bulletin Imperial Institute.

Top-Grafting the Walnut Tree—Ferd Groner.

Black Walnut As a Meat Producer—Henry Stabler.

\$2,000 an Acre by Top-working Pecan Trees—Stiles.

Outline of Northern Nut Culture Activity—Dr. W. C. Deming.

Establishing the Filbert Grove—George Dorris.

Top-Working Northern Pecan Trees—J. F. Wilkinson.

Nut Trees for Highways and Public Places—W. S. Linton.

American Nut Culture—24-page Pamphlet Survey.

East Texans Reap Fortunes on Pecans.

Hazel Blight—Dr. Robert T. Morris.

Co-operating in Marketing Pecans—William P. Bullard.

Cost and Development Pecan Unit Orchards—J. M. Patterson.

Why Pecan Trees Bear Alternate Years—C. A. Reed.

List of Nut Trees for Northern Planting—W. G. Bixby.

Future of Nut Growing—Dr. Robert T. Morris.

Franchise Walnut Orchard Pays Well—Turk.

American Nut Industry—C. A. Reed, Nut Culturist.

What Nuts to Plant in Northern States.

Pecan Rosette; Practical Treatment—W. A. Weaver.

English Walnut: Where To Plant It.

Nut Tree Grafting by an Easy Method—Dr. Robert T. Morris.

Purchase of Chestnut Tree With Reference to Blight—G. F. Gravatt.

Quick Results in Pollenizing Pecans—E. E. Rislen.

Nut Trees to Reduce Food Costs—Chas. Lathrop Pack.

How To Guard Against Faulty Nuts—Harvey C. Stiles.

The Romance of the Pinon Nut Industry in New Mexico

Soil Fertility; Fertilizer Problems in Pecan Culture—J. J. Skinner,

U. S. Department Agriculture.

The Future of the American Grown Filbert—Richard H. Turk.

AMERICAN FRUITS PUBLISHING CO., 39 State Street, Rochester, N. Y.

THE LEWIS HARDY BLACK WALNUT

By H. R. Mosnat

IN THE Lewis black walnut, named for Prof. C. I. Lewis, editor of the American Fruit Grower Magazine, we have the first of an entirely new race of hardy black walnuts, which will no doubt in time become perhaps more important to the East and Central West, including the Corn Belt of the United States, than the English walnut industry now is on the Pacific Slope or the pecan business in the South on account of the much larger territory in which it will grow successfully.

The hardy black walnut is the third side to the triangle of the three most important nut trees in the United States.

Up to this time the great objection to the black walnut has been that the nuts are hard to crack and it is still harder to get out the meats. With the Lewis hardy black walnut this is all changed. The shells of the Lewis are of a glassy nature and crack with ease. Complete halves can be extracted readily. A power machine has been invented which cracks several hundred pounds of ordinary black walnuts a day. In such a machine an easy cracking nut such as the Lewis will of course crack very satisfactorily and rapidly.

The United States Department of Agriculture states that there are 81 million acres of idle land mostly in the East and Central West fit only for growing trees, and much of this now idle land is suitable for hardy nut trees, including the black walnut. Besides, each of the Corn Belt states has a million and a half or more acres of very rich land, but subject to overflow, and so now practically worthless. Such lands are the natural home of the black walnut.

Dr. John H. Kellogg, head of the world famous sanitarium, says that nut trees, and especially the black walnut, will some day save the world from protein starvation. Nut trees are a natural and adequate source of protein and fats which are the most expensive foods because the hardest to produce. Those in position to know claim that nine times as much protein and fats can be produced on land devoted to black walnuts as on the same land given over to beef production.

S. W. Snyder, the leading nut Nurseryman of Iowa, says that black walnuts have become a hobby with him and that he is advising young men to plant their best land to black walnuts in a commercial way, because he knows of nothing that will pay as well on the best Iowa land. If this is true of the older varieties of black walnuts, such as the Thomas, Stabler, Ohio, and others, it is doubly true of the Lewis, which is the greatest advance so far made in securing an improved variety of hardy black walnuts.

The outside shell of the Lewis is smoother than other black walnuts. The parent tree is from a nut in a row of trees planted about 70 to 75 years ago. It is about 90 feet tall and as much in spread and the trunk is about 3½ feet in diameter. It is growing

on the poorest kind of poor soil and has no air drainage. The land is usually flooded in winter and burns hard as a rock in summer. A few years ago this tree stood an early cold spell of 20 below zero for two weeks. If ever a walnut tree grew under adverse condition, the parent Lewis tree is it.

The parent tree produces nuts of good size, larger than the Thomas; but, grown on fertile soil and under more favorable conditions, the nuts should be considerably larger.

The flavor of the Lewis black walnut is milder than other black walnuts, being more

"THE FUTURE OF NUT GROWING"

An Illuminating, Informative Address
in New York City by Dr. Robert T.
Morris, Leading Advocate of
Nut Culture in America

We have reprinted the stirring address delivered by Dr. Robert T. Morris recently in New York City, which was published on two pages of the March issue of the AMERICAN NUT JOURNAL.

This address should be read, not only by all who are interested in any way in Nut Culture, but by thousands of others who have not learned of a subject to their advantage and to the lasting benefit of the country. It marks a forward step in this industry the products of which are shipped in carlots from the Southern and the Pacific states and which is attracting increasing attention in its development throughout the Northern states.

Nut culture is the coming thing. There is opportunity to get in on the ground floor right now—not through large investment, but through intelligent use of moderate means and the application of methods and material at hand as the result of long experience based upon successful investigation.

Copies of this address may be had, while they last, for 10c each from the American Fruits Publishing Co., P. O. Box 124, Rochester, N. Y.

like the quality of the English walnut, but with a distinct and pleasant black walnut taste.

The black walnut is a hardy tree. It has been lumbered commercially as far north as southern Minnesota and the black walnut flourishes in southern Ontario, Canada. It is said that the black walnut is the only nut tree that grows in every state in the United States. Black walnuts do unusually well in parts of northern Florida.

Black walnut growing has always needed the impetus of a better variety than any so far known, and in the Lewis black walnut we seem to have this long desired better black walnut. The Lewis is being tested in

Canada, New England and southern Alabama to learn its adaptability to widely separated sections. There is no doubt as to its being very much at home all over the Corn Belt and anywhere else that the ordinary black walnut grows.

It is hard to estimate the ultimate value of such an improved black walnut as this. It will do well over such a large territory and on land of little value for any other crop—literally millions of acres—and the crop of black walnut meats will be consumed rapidly as soon as there is a supply to be had. For instance, Thomas meats sold this season for \$1.35 a pound, while wild nuts in the shell sold for only seven cents a pound to the grower. Candy manufacturers will be glad to use black walnut meats by the carload—but cannot get them. One bushel of nuts in the shell will crack out about eight pounds of meats.

The Lewis black walnut cracks so easily that it avoids the difficulty of small bits of shell with the meats—a serious trouble with other black walnuts. Also, the candy makers and bakers prefer half meats instead of smaller pieces, and this condition is easily met by the Lewis black walnut. The right way to market nuts, especially black walnuts, is to sell the meats. The shells are good for fuel and also make the best charcoal for gas masks. The husk makes a wonderful dye, used for hair dye, kahki dye, etc., so there are interesting by-products. In the South pecan meats are packed in vacuum cans, both glass and tin, and in this convenient package, the meats keep almost indefinitely in good condition. This same method can be used for black walnut meats. The California English walnut crop is being sold more and more in the form of cracked nuts; that is, the meats. Large consumers especially do not care to bother about cracking the nuts they use.

Prof. J. A. Nelson, Department of Horticulture, Ontario Agricultural College, Guelph, Ontario, says of the Lewis black walnut: "The nuts have just arrived and have been examined. I am very well pleased with them indeed. They crack easily and have a large kernel which should be very good for eating when properly cured. I think you have made a real find in locating this valuable black walnut."

Dr. Robert T. Morris, New York City, writes that the Lewis black walnuts cracked easily and two complete halves were extracted and that the kernel is of excellent quality. He says that he wants to add this black walnut to his collection.

Dr. John Harvey Kellogg, writes of the Lewis black walnut: "If I had such a fine tree as you have, I should certainly value it most highly."

On some of the highways of California locust and other trees have been cut down and walnut trees planted.

Just mention AMERICAN NUT JOURNAL

The Round Table

Some Running Comments

Where is there a living tree of any sort in the world today which may not be replaced by one which will furnish a paying crop?

Along the boundary fence of one of my acquaintances there are thirty Carolina poplar trees about thirty-five years of age that are now passing over into a stage of decline. They have furnished nothing but leaves and waste products to be swept up whenever they got in the way. I asked my friend why he had not set out Japanese heartnuts instead of Carolina poplar trees and which would have furnished beautiful flowers in the spring, handsome foliage during the summer and at least \$10.00 worth of nuts per tree per year. He replied "I had not thought about it."

On the way down on the railroad train I passed a farm with rich ground which had been ditched and lined with willows on the banks. An acquaintance of the owner was in the seat with me. I asked him why those willows were not grafted black walnut trees, bringing him in a fine annual income. He replied, "I suppose the owner never thought about it. People generally do not associate the idea of crops profit with a tree."

That is just it. People simply don't think about it.

In the "Proceedings of the Twenty First Annual Convention of the National Pecan Growers Association I find an article on the subject of "Disposal of Low Grade Pecans," by J. M. Patterson which deserves wide reading. Some years ago when we had chiefly Texas seedling pecan nuts in the market a good many of my acquaintances were in the habit of buying pecans regularly every year for the table. Some of them now buy no pecans at all. When I have brought the matter up in conversation and have asked the reason they have said that it was because the New York market had made a feature of so many big empty shells of pecans with inferior meats that it was too much of a gamble and they were doing no more purchasing. I have asked them to call for named varieties and to buy from responsible dealers in the South. Some of them have done that but the majority have rather put pecans entirely out of mind at the present time. These are people who once had them in mind every year.

I assume that the movement toward co-operative marketing of pecans which is now well under way will not only restore the northern market but will make a rapidly expanding new one.

On other pages of the "Proceedings" I find a discussion of the old subject of intercropping of pecan trees with fruit trees. If this problem includes the idea of raising fruit which must be rushed to market, thereby introducing complicated labor questions, why would it not be better to talk about grafted hybrid chinquapins and grafted seedless persimmon trees for furnishing intercropping? These small trees can be cut out as rapidly as the larger trees encroach upon them and without causing any hard feelings.

Some of the Southern orchardists who are using the paraffin method in their grafting work for fruit trees and for nut trees say that it works beautifully during the early part of the season but for the late grafting work the hot sun melts the paraffin and in-

THE IMPORTANCE OF TREE SURGERY

TO THE conscientious top-worker as well as the party who has trees which he is contemplating having worked or has recently had worked, this topic of surgery is of greatest importance. I have read countless articles on the subject of top-working and there are few that bear any weight on or allow much space to the discussion of surgery work.

My work for the past three years has been mostly with the pecan; orchard plantings, Nursery work and top-working of seedlings and unprofitable varieties. Previous to that time I was engaged in government work, for two years, and for two years was employed in the top-working and care of several hundred acres of native hickories to pecan near Columbia, S. C. This last mentioned undertaking is perhaps the most extensive of its kind in the world. The value of top-working pecans cannot be questioned. The main fault in most of the work that I have come in contact with is in the operation as it is carried out. I was called upon two years ago to go over and remove any seedling growth remaining in an orchard that had been top-worked about five years previous to that time. Evidently there had not been even the slightest attempt at surgery work. There were many decay cavities where branches had been improperly stubbed that were big enough for me to force my hand and arm into. This is only one instance among many that I could recall. It seems to be the opinion of both orchard owners and top-work contractors that the securing of a good head of living buds constitutes a highly successful job. This of course is very essential but should the surgery work be neglected?

What is the trouble? Who is to blame? I fear that there are many good propagators, men well experienced in the art of budding, who have studied very little the tree they deal with and the effects of the severe cutting back upon it.

From a business standpoint, many top-workers even though they appreciate the value of surgery work, feel that they cannot afford to do this work in combination with their top-working. I was talking with a top-work contractor recently, relative to surgery work and here's the attitude that he took: "Well, if I do all necessary surgery work, I'd starve to death doing it at the same price; and if I increase my price, I'll starve because some other fellow will take the job and say nothing about surgery." And he is right. Tree owners do not appreciate the value of surgery; they do not realize that it is just as important a part of top-working as the inserting of buds. If they realized this, they would demand it in their contract, even at a slight increase in cost. The cost of cavity filling in later years, if surgery work is not done, will be several

terferes with the success of the method. Some of them have overcome the difficulty by fastening a little roll of paper around each graft with a little rubber band of the sort that may be bought by the pound at stationers. This has worked pretty well but I have asked the Standard Oil chemical folks to tell me how to raise the melting point of parowax in order to simplify matters for southern horticulturists. The reply will be published in the Journal as soon as the report is made.

ROBERT T. MORRIS.

times greater than the increase in original price to include surgery work.

A brief discussion of the main points of surgery work that should accompany top-budding will be appropriate here. Most readers of this magazine I feel are familiar with the process and steps taken in converting a tree from one variety to another. The cutting back of a tree or stubbing, especially in large trees, leaves many exposed surfaces which invite decay organisms. The object of surgery is to make all cuts so as to insure healing over as rapidly as possible and to keep these cut surfaces well protected with a waterproof, non-injurious paint until the surface is completely healed over. Most of this work will be done in the winter or early spring following the insertion of buds, at the time when the cutting back to buds is done, though it should be followed up at each operation in connection with the converting of the tree into its new variety. The tops of all stubs should be removed with a sloping cut running from the base of a budded shoot or other stub, as the case might be, downward at an angle of approximately 45 degrees. These sloping cuts will shed water off much more readily than a squared off cut and they will eventually heal completely over, whereas a squared-off top will never heal over. The idea of making all cuts with a slope is an old one. A tree forms tissue and growth in the cambium layer just beneath the bark, and the nearer we can run our slopes in conjunction with the cambium, the quicker will wounds heal over. Of course we must have a vigorous bud growing from the upper end of each slope in order to furnish feed for the forming of tissue to cover the sloping wound. All exposed surfaces should be kept covered with a coat of either white lead and linseed oil paint or liquid coal tar until wounds are completely covered.

Here is a slogan that I am adopting for my business. "Demand Top-working with Surgery Work As an Insurance to the Life and Health of Your Trees." Bear in mind the wonderful work that John Davey began and is still doing. Most of his work with shade trees is done because sometime in the past proper methods were not used and because of neglect. If the shade tree demands proper surgery how about the pecan whose place in life is not only to furnish shade and beauty, but these combined with profit.

A. C. DIBBLE, Jr.,

Commercial Horticulturist.

Orangeburg, S. C.

Cannot Get Nursery Stock

The Wellington City Park Board made an effort during the past winter to secure a number of nut trees to be planted in the parks, but was unable to locate the stock. The state agricultural College promised to give us some, but they failed. Within the last few days a place has been found where it is believed a number of good varieties can be found for shipment at tree planting time next fall. The park board will take quite a number and the News will get prices and full information before ordering, so that individuals who want a few trees for their farms or homes may have an opportunity to get some well selected trees.—Wellington, Kan., Republican.

Texas claims to produce 50 per cent of the pecans of the entire world; in 1919 a crop to the value of \$3,650,000, "nine times the crop of Georgia."

If it relates to nut culture it should be in the AMERICAN NUT JOURNAL. Please send it in.

American Nut Journal

COVERING NUT CULTURE

NORTH—SOUTH—EAST—WEST

AMERICAN FRUITS PUBLISHING CO., INC.
89 State Street - - Rochester, N. Y.

RALPH T. OLCOTT, Editor and Manager

Official Journal Northern Nut Growers' Assn
Official Journal National Nut Growers' Assn

SUBSCRIPTION RATES

One Year, in advance.....\$2.00
Canada and Abroad.....2.50
Single Copy20

ADVERTISING RATE

Per column inch.....\$2.80
Forms Close 10th of each month

ROCHESTER, N. Y. MAY 1923

NUT ASSOCIATIONS

California Almond Growers' Exchange—President, G. W. Pierce; manager, T. C. Tucker, 311 California St., San Francisco.

California Walnut Growers' Association—President, C. C. Teague; secretary, W. T. Webber; manager, C. Thorpe, 1326 East Seventh St., Los Angeles, Cal.

Central Alabama Pecan Growers Association—President, C. Kirkpatrick, Selma, Ala.; secy-treas., Morgan Richards, Selma, Ala.

Georgia-Florida Pecan Growers Association—President, J. M. Patterson, Putney, Ga.; vice-pres., A. C. Snedeker, Blackshear, Ga.; secy-treas., J. S. Wight, Cairo, Ga.

National Pecan Growers Association—Prest., Charles A. Simpson, Monticello, Fla.; vice-pres., J. M. Patterson, Putney, Ga.; and E. C. Butterfield, Winona, Tex.; secy., J. Lloyd Abbot, Spring Hill, Ala.; treas., J. Slater Wight, Cairo, Ga. 1923 meeting, Jacksonville, Fla., Oct. 2-4, 1923.

National Pecan Growers' Exchange—President and manager, William P. Bullard, Albany, Ga.; vice-pres., J. B. Wight; secy-treas., A. D. Galt.

Northern Nut Growers' Association—President, James S. McGlennon, Rochester, N. Y.; vice-pres., J. F. Jones, Lancaster, Pa.; treas., Willard G. Bixby, 32 Grand Ave., Baldwin, N. Y.; secy., Dr. W. C. Deming, 983 Main St., Hartford, Conn. 1923 convention, Washington, D. C., Sept. 26-28.

Oklahoma Pecan Growers Association—President, O. K. Darden, Ardmore; secy-treas., C. E. Ringer.

Southeast Georgia Pecan Association—President, Dr. W. H. Born; vice-pres., Col. G. H. Harris; secy., J. H. Girardeau, McRae, Ga.; treas., E. F. McRae.

Texas Pecan Growers' Association—President, H. G. Lucas, Brownwood; vice-pres., John P. Lee, San Angelo; Secretary, Oscar Gray, Waxahachie.

Western Nut Growers' Association—President, Ferd Groner, Hillsboro, Ore.; secy-treas., C. E. Schuster, Corvallis, Ore.

A PERTINENT QUESTION

Some years ago a householder in Portland, Ore., planted eight seedling Persian walnut trees along the street in front of his residence. Now, he has all the nuts his family can use during the year, divides with the boys of the neighborhood on their own terms, and sells what are left for almost enough to pay his taxes.

This tale, vouched for by the president of the American Tree Association, is told as a preliminary to a question: Do folks of the Middle West, in planting ornamental trees and shrubs, pay enough attention to fruits and nuts, particularly the latter?

The acreage in Persian walnuts in Western Oregon is now 9,000 to 10,000 and is increasing at the rate of 2,000 acres a year. Rapid gain is expected as the Nurseries become equipped to supply grafted trees for planting. The Salem district produces the super-nut.

THE STATE OF THE ART

The advancement of nut culture throughout the country is progressing steadily. Like all other lines of endeavor it requires constant attention and there are obstacles to be surmounted. Commercial nut culture has been in progress for years on the Pacific coast and in the Southern states. One of the chief problems is the establishment of nut culture on a commercial scale in the Northern States. Nut trees grow naturally in the Northern states. It has been said that the black walnut is found growing naturally in some part of nearly every state. The investigations by Prof. Nielson show that nut culture in Canada has bright prospects and the Dominion Government is considering the appointment of a director of this work.

Nut growers are organized in all parts of the country. What seems to be needed is extension of lines already laid down. In the fields where commercial nut growing has for some time been in progress, rapid results follow effort at development. Texas is showing marked activity in the direction of establishing orchards of improved varieties of pecans while at the same time planning to organize the marketing of the very large native crop.

In the Northern states members of the Northern Nut Growers Association have been unusually active this year, delivering lectures in their various sections on nut culture and obtaining publicity through the local press. The Journal is recording monthly the planting of nut trees in orchard form in the Northern states and the office of the Journal and those of Secretary Deming and President McGlennon of the Northern Association are in daily receipt of information on the subject. The greater the amount of nut orchard extension in the Northern states the sooner will tangible results be reached upon which to base further development.

C. A. Reed, pomologist, Washington, D. C., specialist in nut culture suggests the desirability of some plan whereby at a single stroke the entire country, not only the North and East but the South and West as well, will find itself suddenly planting trees, useful trees, nut trees, at a rate which will go a long way towards stemming the present tide of forest destruction. Just now the saw mills, the country over, are running at full blast, using up the little timber that is left. "I wish," says Mr. Reed, "that some way could be found for extending the kind of work former President W. S. Linton, of the Northern Association, is doing in Michigan."

Directly along the line suggested by Mr. Reed is the work of the Tree Lovers Association of America, the secretary of which, J. A. Young, Aurora, Ill., is vigorously and effectively conducting campaigns twice a year, spring and fall, in a great national tree planting movement, under the slogan: "Plan to Plant Another Tree." Tree Planting Week, on dates suited to the climate conditions is being observed in all the states with enthusiasm.

The offices of the Association have been snowed under, according to reports of Secretary Young, with responses of every sort. From all over the country, hundreds of Women's Clubs, Chambers of Commerce, the American Legion and its Auxiliaries—every variety of organization, have sent reports of activities in community planting and reported the enthusiasm prevailing over "Plan to Plant Another Tree." Schools have been

particularly responsive. Many superintendents have put the program into part of their county curriculum. Individuals have written their personal delight in the advance of both the practical and idealistic phases of the movement. From coast to coast the most gratifying results have been obtained in hundreds of communities.

"When the results of the remaining Tree Planting Weeks are reported," states the Secretary, "we will have a record of the most widespread accomplishment in individual planting that America has ever known. We lay the stress on individual planting under club direction, believing that this is the only satisfactory way of creating an enduring interest in planting."

The public is learning that when planting a tree, one that will produce food as well as leaves can just as well be planted, with resulting beauty and shade.

THE MORRIS BLACK WALNUT

We have directed attention to the enthusiastic work of H. R. Mosnat, Chicago, Ill., of the Northern Nut Growers Association and have predicted that he would produce interesting results in behalf of Northern nut culture.

Well, locating two valuable black walnuts in one season is quite a record.

In the last issue of the Journal description of the Morris black walnut was given. In this issue Mr. Mosnat writes in detail of the Lewis black walnut.

Dr. Morris writes to Mr. Mosnat about the nut named after him:

"I believe that the desirable cracking feature of the black walnut will be a very important matter for commercial reasons. I have no objections to your giving my name to the black walnut in question, should you desire to do so, and thank you for the idea; but I have been rather in favor of giving serial numbers to new walnuts. The flavor is too pronounced for table use, but will be in special demand by confectioners and bakers. The cracking and cleavage is good, likewise the size; but that doesn't count. Quality and cleavage are the two main things in black walnuts."

F. A. Spivey, Montgomery, Ala., to whom Mr. Mosnat sent sample of the Morris, writes that he is particularly pleased with its flavor. "If produced in quantity there certainly should be a market for them. I was able to get the meats out in halves and quarters with very little trouble, and was glad to note that they were light colored—which would be a distinct advantage in marketing them."

Mr. Mosnat says there are candy manufacturers in Chicago who would gladly buy Morris walnut kernels in ton lots. One manufacturer told him he would buy a carload of them and pay a good price; he is not the largest manufacturer of candy in Chicago. This illustrates the demand for the black walnut. Why not plant black walnut trees commercially?

A JOURNAL BEHIND THE TIMES

The Farm Journal repeated in a recent issue its illustrated description of grafting trees according to the old methods which it published last year at about this time. This old-fashioned method of grafting is so difficult to do well and so uncertain that comparatively few can make a success of it.

Dr. Robert T. Morris, of New York, has devised a method by which almost any boy can graft successfully almost any kind of tree at

almost any time of year. Surely so old and so widely circulated a journal as the *Farm Journal* has in its library a copy of Dr. Morris' book "Nut Growing" in which this new method of grafting trees is fully described, with illustrations; and surely a publication of the standing of the *Farm Journal* will not wish to remain behind the times. At least its editors might profitably announce the Morris system of grafting, with illustrations, as well as the old systems, and let the readers try out the new. The success of that trial would undoubtedly determine which method the *Farm Journal* should continue to advocate. The information is immediately at hand in the office of that journal.

A New "Triple-Deck" Farming

By H. R. Mosnat

A great deal has been said about dual purpose or "double-deck" cows and chickens—that is, cows that are profitable for both beef and milk and birds that pay both for eggs and meat.

There is another kind of "double-deck" or more accurately triple-deck farming, that should receive attention.

This is making use of the surface of the ground for pasture for "double-deck" cattle and using the air space above the ground for hardy trees, such as black walnut, hickory, hardy pecan, hybrid hickory-pecan, chestnut in the West where distant from the blight, and other hardy nut trees which will produce as much valuable food per acre as the same acre when devoted to livestock.

Hardy nut trees require plenty of room. Black walnuts, hickories and such trees should be set 50 feet apart and 60 feet is even better. At fifty feet this is only about twenty trees per acre. As soon as the trees are of sufficient size, stock will not harm them. Cultivation of strips along the trees of course will help their growth, but the centers can be in pasture, and this will prevent washing on rough land.

Hardy nut trees of the best budded varieties to be had will come true to name the same as fruit trees. Seedlings will not come true any more than a seed will come true with a variety of fruit tree.

With this double-deck or triple-deck plan, both kinds of the most valuable food—vegetable protein and animal protein—are produced at the same time on the same land.

Grafted black walnuts only seventeen months from the graft have borne seven nuts. This is better than most fruit trees would do.

In the East and Central West there are 81 million acres of idle land fit only for growing trees. By planting this idle land, some of our vanished forests can be replaced. Much of this land is suitable for some variety of hardy nut trees. These will supply excellent food and excellent lumber besides. No doubt much of this land should never have been plowed or cultivated.

These hardy nut trees are vigorous and are natives of this country. They will succeed and prosper under conditions that would be fatal to fruit trees. They will also respond generously to good care and cultivation. Eighty-one million acres is more than the combined total size of the states of Iowa and Illinois.

It has been stated that if all the shade trees in Salem, Oregon were bearing English walnut trees of the right varieties the sale of the nuts would pay all the taxes of the owners of city property.

Money and Land Available

Opportunity for Nut Culture on Large Scale in the Mountains of Kentucky—Will It Be Improved?

According to the newspaper press E. O. Robinson, of Fort Thomas, Kentucky, has given \$1,000,000 to be devoted to the betterment of the mountaineers of Kentucky. The mountains of Kentucky abound in hickories, black walnuts, butternuts and chestnuts. The chestnut blight at present would make the raising of chestnut species in Kentucky precarious, but there would be limitless opportunity for grafting young growth of cut-over lands with fine varieties of hickories and walnuts for which there is at present a wide open market and one that is growing steadily. We are familiar with this region and we doubt if any other crops would give such prompt and large values as would be obtained from nut crops, if the mountain folk were to take up nut growing as it is done in some of the mountain districts of southern Europe and northern Asia, where conditions quite similar to those of the Kentucky mountain district are found.

Practically the whole agricultural income, and a large one at that, is derived from nut crops on land similar to Kentucky mountain land in other parts of the old world. In our southern mountains cut-over lands are largely given over to "catch as catch can" new growth some of which will doubtless be of forest value eventually and some of which on the other hand will be devastated by forest fires. Reforestation with coniferous trees and hardwood trees of various kinds will be of advantage for the very roughest of our southern mountains, but nut growing giving a larger and more prompt profit might occupy the larger part of cut-over lands or even of lands injured by unwise tillage on hillsides where erosion carries the land to the streams.

The agricultural institutions of Kentucky now have the chance of a lifetime if they secure from the Robinson fund money for the education of the mountain people in ways of grafting and cultivating nut crops. Incidentally also crops from grafted and persimmon trees of various sorts. Some of the varieties of nut tree grafts will begin to bear in two years from the time of grafting and it is also true of persimmons. The market for nut crops, however, is wide open and hungry. The persimmon market is still new and restricted, but growing.

Here is an opportunity for activity on the part of the Northern Nut Growers Association. Doubtless Mr. Robinson would welcome suggestions and advice as to efficient means for bettering conditions.

Rochester Branch, Nor. N. G. A.

The second stated meeting of the Rochester branch of the Northern Nut Growers Association was held April 28th at the Osburn House, Rochester, N. Y., President James S. McGlennon presiding. At the suggestion of the editor of the *American Nut Journal* plans were made for enlightening the public on the profits as well as the pleasure of nut growing. It was decided to hold a public meeting on May 16th in Rochester, at which a formal program would be presented with addresses by experts and by those who have brought nut orchards in Northern states to highly profitable results. Information on commercial nut culture will be presented and questions answered. Reports of the meeting will be made in the local press.

What section of the Northern states is to have the honor of the second branch of the Northern Nut Growers Association to be established? There are probably enough members of the Association to start a branch in one of the New England states, Connecticut, for instance. It would seem that interest in nut culture in the vicinity of Evansville, Ind., would warrant the calling of a meeting for the purpose of forming such a branch society. Evansville is close to the location of the parent trees of those fine varieties of Northern pecans, the Butterick, Busseron, Posey, Niblack, Green River, Major, etc. Central and Southern Illinois people have been talking nut culture a long time and lately have been listening to addresses by at least one Northern Association member. They might get together. It's easy. Just meet and plan. All it needs is a leader. From Center Point, Iowa, has been going out a great deal of information on nut culture. Surely those interested individually would profit by society association. Who'll start it?

M. V. Landman, Cranberry, N. J., in her catalogue of Forsgate Farms gladioli, dahlias, peonies and iris, includes a listing of nut trees, saying: "We do not know of any long-lived tree which would produce more interesting results in four years and give so much promise for the future." She suggests membership in the Northern Nut Growers Association and subscription for the *American Nut Journal* under the combination offer of \$3.25 per year.

"I don't know just how long it will be before these trees bear," said the planters of an orchard of nut trees to the friends who were indulging in facetious remarks about the length of time he would have to wait before the young trees began to produce, "but I do know that they will be bearing nuts a long time before the trees you are not planting."

ALL INTERESTS CO-OPERATING

ATENTION to the mutual interests in the Nut Industry is succinctly directed by Manager T. C. Tucker of the California Almond Growers Exchange: "We are a strictly co-operative organization, including Grower, Broker, Wholesaler and Retailer."

This may be said also of organized effort in the production and distribution of Walnuts and Pecans, each of which is represented in Associations.

It is because of this co-operative feature that the *American Nut Journal* combines the news of the Nut Industry in the fields of Production and Distribution. Its Market and Crop Reports will be of increasing value.

It is of prime importance that the market shall be supplied; a supply is the basis upon which a market exists.

It is also of prime importance that a market be created and maintained; distribution of the product is what makes the industry.

The *Journal* desires to co-operate heartily with producer and distributor, and to that end welcomes frequent communications by way of comment on current events, personal mention, trade news and suggestions. It is the logical medium for interchange of trade comment and the recording of trade activities.

To the State Vice-Presidents of the Northern Nut Growers' Association and all Members of the Association:

At the 13th annual convention of the Northern Nut Growers' Association held at Rochester, N. Y. Sept. 7-9, 1922, in a discussion on means for enlarging the membership of the association and its sphere of work, a member said that the list of vice-presidents for the different states was printed in the report from year to year and, he supposed, was never changed. The secretary replied that the list was changed every year in the hope of eventually finding a vice-president who would work, but so far the quest had been unsuccessful. He promised, however, that he would write them a quickening letter, if he could. This is the letter. It embodies the ideas on the subject of enlarging the membership of the association brought out in animated discussions at the convention.

At the very beginning the president offered to guarantee a hundred new members in the coming year if each member present would promise to get ten, or turn the money equivalent into the treasury. Ten members responded, thus making two hundred new members, or their money equivalent, promised for this year on the president's initiative act alone. Now the secretary wishes to ask each of the state vice-presidents, or any member who would like to be a state vice-president, to put himself in the place of the members who made these promises—and some of them were new members who had never before attended a meeting—and pledge himself to do the same that they have, namely, to get ten new members, or their monetary equivalent, during the coming year. The president says he must have a thousand members at the time of the next convention. We have 310 and two hundred more pledged; we need, therefore, 490 more.

After this splendid example set at the convention by the president and these ten members—and in several instances the monetary equivalent of ten new members was paid to the treasurer on the spot—it does not seem unreasonable, besides asking each state vice-president to get ten new members, to ask that every other member get at least one more new member this year. And let us hope that this will become every new and old member's perennial habit—getting at least one new member every year, besides paying his own dues—thereby in time enlisting the whole human race. Let us remember that this is a scientific and educational association, supported only by dues and contributions and with no paid officers, and that each member is himself a pioneer and a missionary. A member who feels himself a poor solicitor can easily solve the problem by following the advice of our president and sending a membership, and the Nut Journal, as a present. Then tell the secretary about it.

The secretary further makes the following suggestions, gathered from the discussions at the convention, for increasing our membership and influence.

(a) There should be subsidiary associations or societies, branches of this association, in every state, or in groups of states under similar conditions. Such associations should hold an annual meeting at the time of their state, or interstate, fair and make exhibits at the fairs where great numbers of people could see them. Association literature should be distributed and memberships solicited. Copies of the American Nut Journal and Dr. Morris's book on Nut Growing should be on sale. Many interesting possibilities will suggest themselves. The secretary can supply lists of nut growers and "prospects" in almost any state in the Union to any member who will undertake to try to interest them in a local association.

This would naturally be the duty of the state vice-presidents, but there is nothing in the prerogatives of this office which should deter any member not a vice-president from usurping them in case of dilatory action by the holder of them. In such a case it would certainly not be out of place that the mantle of dignity of this office should fall upon the shoulders of the active member. And the secretary would use his influence with the president to that end.

(b) Those who can give talks before agricultural or horticultural societies or clubs, garden, bird or game clubs, granges, schools and similar institutions, should do so on the subject of nut growing, and not be afraid to show why anybody who wishes to promote that industry should join the Northern Nut Growers' Association. The United States Department of Agriculture has lent us a set of lantern slides, from the great collection of the department, for use in lectures by any member of the association. Application for these slides should be made to the secretary. The secretary has also a small collection of his own which is available. Mr. Weber of Cincinnati has made a very good one for his own use, and others are making them. The secretary will be glad of the loan of negatives of interesting subjects from which to make slides. The secretary will also be glad to furnish, if desired, outlines of talks on various phases of nut growing, and has a small but interesting collection of specimens which, under suitable conditions, he would be glad to lend.

(c) Any one of us can write little articles on nut growing for the local press. Some of us could write magazine articles with illustrations. These are often well paid for. Any one who feels diffident about accepting pay could turn it over to the association which is impersonal and not diffident. The outlines which the secretary has offered to furnish for talks could also serve as outlines for articles, and the secretary could, if necessary, also furnish a number of illustrations. He might further be able to lend aid in furnishing nuts and trees for public planting.

If each of our members would give one talk on nut growing, preferably illustrated, or write one article, preferably illustrated, during each year, it would be of great effect in spreading the gospel.

Many cities have courses in public educational lectures every year for which they pay a small fee and are glad to get lectures on new things like nut growing. Lecturers and writers should never forget to name the Northern Nut Growers' Association and to ask people to join it.

(d) Mr. Jones has offered to give two seedling nut trees grown from selected nuts to each new member up to 500. This includes packing and mailing. Can we not make Mr. Jones realize the magnitude of his offer and use up all of those thousand trees? They include seedlings of the Stabler black walnut, of the Mayette Persian walnut and of specially selected Chinese walnuts. A copy is enclosed of a circular descriptive of these premium nut trees to be sent out with each tree so that there shall be no con-

Pecans For Shade Trees

As I have gone from one town or city to another in Texas I have visited practically no community where pecan trees can not be successfully propagated or grown. From both a climatic and soil viewpoint, the pecan is naturally indigenous to Texas. While it may be granted that they will grow to better advantage in the deep alluvial soils, or creek or river bottoms, yet there are innumerable standing evidences of splendid growth and development in the high prairie sections and in the stocky, black waxy soils of this state. If given the same attention and with a reasonable amount of water accorded to other trees, there is no reason why they should not thrive successfully.

The laws of this state have recognized that fact by declaring, through legislative action, that the pecan shall be designated as the Texas state tree. Texas produces the largest quota of pecans marketed in this country. Texas nuts rank extensively as the sweetest, richest and most palatable nuts grown anywhere. Texas has, through its pecan sales and shipments, increased its aggregate wealth by thousands of dollars from its natural forests, and yet this industry is but in its merest infancy. If the native nuts have accomplished this, what would be the consequence if the thousands of native trees now bearing small, cheap, uncommercialized nuts should be top-worked thereby converting the fruit into the large, thin-shelled, valuable, commercialized pecan? The magnitude of the industry, and the aggregate increased financial addition would be almost unbelievable and inconceivable.

For these reasons, why should not every town, city or community in the state put on an active campaign for increasing our pecan output? Why should not every Chamber of Commerce or civic business organization co-operate, spreading the propaganda and promoting the industry? Why should not every community plant trees that will be useful as well as ornamental? If communities, in urging the growth of more shade trees, would urge the necessity of plant pecan trees instead of the ordinary hackberry, catalpa, cottonwood, elm or other similar trees, just think what a wonderful advantage would redound to the various communities and to the state at large from a financial standpoint, as well as the satisfaction of providing a fruit and diet that would be invaluable!

The various trees mentioned are short-lived, subject to insect depredations, decay and deterioration. The pecan is a more stately, magnificent, beautiful shade tree than any of the others mentioned, and in addition thereto has a longer life, for the authorities tell us that there are pecan trees in this country that are hundreds of years in age, and that they will withstand more abuse from drouth, insects and other causes than the trees above enumerated. I venture the assertion that there is scarcely a town in Texas that can not have, if it wills, every street and avenue lined with thrifty, umbrageous, beautiful, long-lived, bearing pecan trees within a few years after planting them.

Then why should our people not awaken to the advisability of such an undertaking? Why should they delay? Why should they not get the vision now, and the immediate benefit of such venture, rather than wait for generations yet unborn to grasp that vision? That condition will ultimately be brought about just as surely as the world exists. Why not put it into active operation now.—P. L. Downs, Temple, Tex., in Dallas News.

Call For Trained Men

The Agricultural College at Auburn, Ala., is receiving requests to supply trained men for agricultural work, which shows that college-bred men are appreciated. Recently J. E. Dunaway, well known farmer and business man of Orrville, Alabama, requested the Department of Horticulture to "equip three or four young men and have them ready to begin work April 1." This was done under the direction of Prof. C. L. Isbell and other members of the Horticultural Department. They were specially trained in propagating pecans.

If it relates to nut culture it should be in the AMERICAN NUT JOURNAL. Please send it in.

fusion in the minds of the recipients as to the nature of seedling trees as compared with grafted trees.

I believe that Mr. Jones could be induced to furnish some of these trees for planting on school grounds or in public places if guarantee could be given that they would be taken care of. Mrs. Ellwanger also has offered some seedling black walnut trees and it will perhaps be possible, through ex-president Linton, to get seedlings, or nuts, of the black walnut trees at Mount Vernon, the home of Washington, that have been so much sought after. In this way, and by giving talks to teachers and school children, or other associations, in connection with the plantings, people can be interested.

(e) More women should become interested in nut growing and the association. This has been made the subject of a special letter of which a copy is enclosed.

(f) A systematic campaign should be made to enlist the interest and co-operation of school teachers. The members of the association, men and women, almost every one, must have a tie, more or less close, with some school, or more than one, where he could get the interest of the teachers, if he would. Offer trees or nuts to plant, with a little ceremony, or stage a little talk with object lessons in nuts.

Probably an illustrated article in some paper or journal that is published especially for teachers would reach the largest number.

Direct circularising of teachers seem like an impracticable undertaking with the present resources of the association, but there are teachers' institutes in summer that could be reached, either by circularising the heads or by giving lectures at the institutes, or by publication in institute bulletins. There are also the state departments of education to which an appeal could be made.

Undoubtedly one of the most effective ways of reaching teachers would be by giving illustrated lectures wherever opportunity offered. At one time the secretary gave a number of such lectures for the New York City Board of Education. By means like these, which plainly mean much work, good results could unquestionably be obtained among teachers and, through them, among our ultimate objects, the children, tomorrow's producers and consumers.

(g) Establishing a nursery for the growing of approved varieties of nut trees and their distribution under suitable conditions as object lessons. This object can best be attained at the present time through the nut nurseries already established, through some form of agreement or subsidy, as soon as funds become available. It would be difficult for the association or for any one to do more in the way of nursery development of nut trees than has been done already by the nurserymen connected with our association. Attention is again called to the premium offer of Mr. Jones.

(h) Influencing other states to pattern after Michigan in enacting legislation for the roadside planting of nut trees. A committee was appointed at the twelfth annual convention at Lancaster in 1921 for this purpose, whose report may be found on page 59 of the report of the proceedings of that meeting. It there laid down for itself a definite course of action, and asked to be instructed to take such action, which was unanimously voted. But as yet no action has become audible or visible.

(i) The annual reports of this association, the American Nut Journal and Dr. Morris's book on Nut Culture, ought to be in every agricultural institution in the country. How better could any advocate of nut growing use a hundred or two hundred dollars, if he has it to spare above what he intends to take into the next world with him, than by putting these publications into a hundred agricultural institutions of learning? Better still if he could get these institutions to become paid annual members of the association and subscribers to the journal. This would be a splendid help to nut growing. In this we would pattern after the American Pomological Society.

(j) It has been suggested that Chambers of Commerce be interested in nut growing. That sounds very promising for they have the reputation of being the ideal hustlers. Those who have knowledge of the ways of chambers of commerce may be able to interest some and then report the event and the methods used to the secretary.

(k) "Selling" memberships in the association by the familiar rules laid down in Y. M. C. A. courses in salesmanship is a suggestion that may make appeal to those who have abilities that way.

(l) Making Christmas or birthday or any time gifts of a membership in the association with subscription to the American Nut Journal, or Dr. Morris's book on Nut Culture. The only requirement is this reminder and a few dollars to spare for humanity.

(m) Dr. Morris has for years tried to interest the Boy Scouts by offering prizes. He has a standing offer of \$5 to any boy scout or girl scout, campfire girl, or member of similar organization, who wins one of our nut prizes. Strange to say, although this offer has stood several years, Dr. Morris has never been called upon to pay this special prize. This year Dr. Morris offers another special prize of 10 years subscription to the Nut Journal, and membership in the association, to any boy scout who will win it. The conditions for winning this prize have not been formulated and suggestions are in order. This is a splendid chance for anyone who is connected with a band of boy or girl scouts to start a beneficent circle.

(n) Vice-presidents and members are asked to take the report of the last Lancaster convention and read the address of Dean Watts on page 80. In it he offers the facilities of the Pennsylvania Agricultural Experiment Station to carry out suggestions of our association and asks that the association make out a suggestive programme for the agricultural colleges of the states.

What can I do to arouse the sense of obligation of the state vice-presidents and other members of the association? If you would each add only one new member that would increase the membership by over three hundred. Can't you each get one new member, at least? Make it two and we shall have the thousand that the president asks for.

Won't you look over the suggestions and see if you cannot organize a state society, give some talks, write some articles, get some teachers, schools or clubs interested, or work out some plan of your own? Can't you come to Washington next year, Sept. 26, 27 and 28, and talk it over with the rest of us? If you just can't come will you write the secretary a long letter and tell him what you think about him and our aims and accomplishments?

W. C. DEMING Secretary

BLACK WALNUT

A Granddaddy Walnut

The parties who are buying up walnut logs in this section captured the granddaddy of all the walnut trees of the county on the W. S. Sturgess place on North Caney. The butt log was too big to handle conveniently by any ordinary equipment available here and a trail of difficulty accompanied the work of getting it here and loading it on the cars.

The trees are being grubbed out in order to save the stump wood and to keep from splitting and checking the logs. It took a crew of men four days to dig out this specimen. As it stood it leaned over the creek. The largest chain that could be secured and a block and tackle fastened to it to swing it onto the bank when it fell, but when the tree landed against it—bluey, the chain broke and the tree went into the creek!

Arley Mills, Chas. Wendt and "Dad" Mc-Afee took the contract to haul the log to the depot here and worked six days at the task. They secured the heaviest boiler wagon they could find to load it on and were lucky that the wagon broke down only once during the job. When they arrived here with the log there was curiosity to see how much it weighed and they drove it onto the Baxter Lumber Company's ten-ton wagon scales, when, bluey again, the scales broke down!

The log which was eleven feet long was oval in shape and was five feet through the long way of the oval at the small end. It was fourteen feet and six inches in circumference at the center. The man who is purchasing the logs stated that according to the average cubic foot weight for green walnut wood the log weighed 25,000 pounds. Four other logs were cut from limbs of the tree. It is understood that Mr. Sturgess received \$45 for the tree as it stood. The logs being shipped from here are going to Kansas City to be worked up into furniture material.—Sedan, Kan., Times.

Inarching Walnut

According to a report just issued from the office of the farm advisor, at Covina, Cal., two plots have been established in walnut orchards of Los Angeles county in which certain trees have been inarched for the purpose of ascertaining the feasibility of this practice as an aid in restoring trees affected with crown rot and with nematode. So far as can be learned, the inarching of walnuts has never been done before and walnut growers will be much interested in the outcome of these tests.

Walnut crown rot is a disease which occurs in a number of the walnut districts, resulting in the decay of the crown and main roots below the surface of the ground. Frequently the major part of the root system is dead before the owner learns of the presence of the disease. Without inarching there appears to be no means of saving the tree when the disease has progressed so far.

The purpose of inarching plots where nematode is present is to ascertain the possibility of protecting the seedling trees used for inarching against the attacks of the nematode by the application of chemicals including cyanamid and cyanide until the root system is well established and below the area when the nematode works most actively.

Georgia-Florida Pecan Growers

The annual meeting of the Georgia-Florida Pecan Growers Association will be held at Waycross, Ga., May 23-24. President J. M. Patterson, Putney, Ga., will preside. The secretary is J. Slater Wight, Cairo, Ga. Among the addresses scheduled is one on pecan tree pruning by C. A. Reed, pomologist, Washington, D. C.

If it relates to nut culture it should be in the AMERICAN NUT JOURNAL. Please send it in.

The American Nut Trade: Market and Crop Reports

PERSIAN WALNUT

Oregon Walnuts

The Salem district now has between 9,000 and 10,000 acres planted to walnuts; that is, western Oregon has about that, says the Oregon Statesman. The acreage is being increased as fast as grafted trees of the right varieties can be had. The increase for this year will likely be above 2,000 acres; and this will grow each year thereafter, from the present outlook.

There is a seedling orchard of 12 acres near Jefferson, belonging to A. L. Page. This orchard produced last season 13 tons of nuts, sent to the Oregon Growers Co-operative association plant in Salem. This orchard is the oldest for so large a planting in Oregon. It is about 30 years old and the trees compare with mature oaks in size.

The members of the Oregon Growers' Co-operative association marketed through this organization in 1921 about 100,000 pounds of walnuts. They marketed last year about 150,000 pounds. This is an indication of the growth, through the maturing of the trees, mostly. All these nuts are brought to Salem.

All the walnuts received at the Salem plant have been cleaned and dried by the growers. Here they are graded and packed and sent to market. The nuts are first run through a grading machine, which sorts them as to sizes. Then they are picked over by women, who take out the culls—the discolored, cracked or oddly shaped nuts, etc. Then they are packed into labelled sacks for the markets.

The stacks are all branded Oregon Walnuts in big letters. The first grade, the super nut, is the Mistland Grafted. Then, come, next below in grade, Extra Fancy Franquettes, Fancy Franquettes, Mistland Grafted No. 1, Mistland Grafted No. 2, etc. The grading machine so far used turns out about four tons a day. The culls are used for cracking. The association last year sold walnut meats to the trade—cracked nuts.

The supply of every grower is carefully kept on a grade sheet—so he gets credit for his best product as well as his poorest and the benefits that belong to him on account of the superior article, if he supplies any. This grading and packing costs about one-tenth of a cent a pound.

The Oregon walnuts have so far gone mostly to the Pacific northwest markets, but last year some orders went to eastern points, largely for the purpose of getting the trade acquainted with the superior qualities of the Oregon nuts; for the benefit of the growers in future years, when they will have to depended more and more upon the outside trade.

It is claimed as a distinction for Oregon walnuts that they are not bleached, that the natural color of the nut when properly dried and handled is the desired color.

New Walnut Growing Centers

Lompoc and Santa Maria valleys are going to be new walnut growing centers in Santa Barbara county, Cal., within a few years according to Eugene S. Kellogg, county horticultural commissioner. Mr. Kellogg's record show that during the month of December Lompoc ranchers planted 375 walnut trees. In January they set out 972 and in February, 230. In Santa Maria valley 420 trees were planted in January and

34 in February. This makes a total of 2031 trees planted in the new walnut district during the winter months.

California Walnut Institute—12 pt.

Five hundred walnut growers, representing every walnut district of California, gathered at the Puente High School Auditorium recently for the fifth annual Walnut Growers' Institute. This institute was held under the direction of the Agricultural Extension Service and the Farm Bureau walnut growers' departments of Riverside, San Bernardino, Orange, Ventura, Santa Barbara and Los Angeles counties. The committee in charge consisted of E. G. Hotchkiss, Covina; H. S. White, Chino; Edwin M. Sherman, Elsinore; J. A. Smiley, Orange; P. C. Marble, Santa Barbara, and C. E. Kelsey, Santa Paula.

Carlyle Thorpe, general manager California Walnut Growers' Association, gave an illustrated address on "Impressions From a World Tour." He pointed out that, with few exceptions, the walnut crops in China, Italy and France are largely a side issue, the growers deriving their living from some other source, adding, however, that probably more nuts are produced in China than in all California. Mr. Thorpe stated that with the cheap labor in foreign countries, it is essential that California walnut growers produce better nuts than the foreigners and offer them to the consumer in a more appetizing manner.

The resolutions committee offered resolutions recommending that more funds be provided for working out controls for the codlin moth and that the College of Agriculture be requested to acquire a suitable tract of land to try out and study varieties of walnuts.

Dr. L. D. Batchelor of the Citrus Experiment Station, Riverside, gave a report on the results of investigations conducted by him into the causes and prevention of mouldy walnuts. These investigations, he said, clearly showed that mould increases as the nuts are allowed to stay on the ground, and that "stick tight" is more apt to be mouldy than a "clean" nut. Recommendations were made that the black "stick tight" should be harvested at the beginning of the season and kept separate, that green "stick tight" be harvested separately and the husks removed immediately, and that more frequent pickings should be made in order to avoid having the nuts stay on the ground.

Prof. A. W. Christie, division of food products, College of Agriculture, discussed "Dehydration for the Curing of Walnuts."

Walnut Culture In Arizona

C. R. Biederman, Hereford, Arizona, is a frequent contributor to the columns of the Journal. The Tucson, Ariz., Star says that methods employed by Mr. Biederman are to be followed in the planting of large acreages of walnuts in the Greaterville, Pima county district of Arizona. Mr. Biederman's walnut ranch in the Huachuca mountains of Southern Arizona is yielding large returns in walnuts, it is reported. English walnut scions have been grafted on native seedlings.

H. D. Smith of the Tanque Verde section, J. Peters of the Baboquivari district, and E. B. Jones of Greaterville started this month the large acreage which they have set aside for this purpose. The most important feature of the work will have to be carried over until next fall, when the nuts from the native trees will be gathered and planted for the raising of seedlings onto which the English variety of the nut is to be grafted. The grafting can be done within two years of planting, and an ever increasing crop can be gathered after the third season.

D. S. Harris, Williamsburg, Va., has pecan trees beginning to bear. He says they will soon be a desirable addition to his orchard products. So far Persian walnuts have not been much of a success with him.

Just mention AMERICAN NUT JOURNAL.

THE ALMOND

What's In An Almond

In 1922, California produced over 8,000 tons of almonds valued at more than \$2,320,000!

In the old days, almonds as well as Brazil nuts, filberts, pecans and English walnuts were looked upon as a special treat for the holiday season—now are coming to be regarded as real food and their use as a food happily is increasing rapidly.

Those who possess a working knowledge of "food values" know that nuts—and particularly almonds—are among the oldest and best of Nature's nutrient offering to man. In fact almonds are the most highly concentrated of all the natural foods.

By adding 5 parts water to one part blanched almonds, which have been crushed to a smooth paste, we have a "vegetable milk" containing practically the same amount of protein as a cow's milk and in addition 2½ times as much iron. Further, the protein of the almond is a "complete protein" and complete proteins are very rare among the things we eat. Almond milk, so made, does not contain as much of the bone-builder, "lime," as does cow's milk, and of course, could never be substituted for cow's milk as a food.

Three ounces of shelled almonds will supply all the "protein" needed by an adult for 24 hours.

In addition fully 50 percent of the almond is "fat" and the vegetable oil it contains is of fine quality, easily digested and assimilated and delicate and delightful in flavor.

Almonds also contain some "sugar," but no "starch," in fact the chestnut is the only prominent member of the domestic nut family that does contain starch in material quantities.

Almonds almost constitute "vitamine-bearing" food, since both the fat soluble vitamine "A" and the water-soluble "B" are well supplied. Therefore, the almond containing fat, complete protein, vitamins and sugar may be seen as a food rich in nutritious elements. Like other nuts, almonds must be well masticated to be of greatest food value, for otherwise, they may be unjustly accused of being indigestible.

California Almond Crop Worth Over \$1,500,000

Receipts of \$166,057 were in excess of the prices authorized by the members of the California Almond Growers' Exchange for the four leading varieties of almonds, according to the annual report of the exchange. The first quotation was \$1,353,060 for the crop in the state, but T. C. Tucker, manager of the exchange, was enabled to get a figure of \$1,519,117. Mr. Tucker said that the higher price was ordered in the face of a boycott by the large New York buyers and price slashing by independents.

School Children Plant Pecans

An appeal to the parents of children attending the San Antonio, Texas, public schools to let him know how many pecan plants can be accommodated in the back yards was made by L. E. Wolfe, who each year is instrumental in distributing pecans. In addition to this appeal, Mr. Wolfe said, 15,000 circulars were sent to the patrons of the city schools. The seed pecans this year were donated by Gus Duerler, Sr., and Charles Graebner.

According to nut-growing enthusiasts, nut trees will replace most shade trees in the near future. Nut breeding is said to be 150 years behind that of apples and other fruits but it is fast catching up; some day we may have a larger black walnut with a paper shell. Among the varieties recommended for orchards are black walnuts, hazel nuts, pecans and those sorts of chestnuts which are resistant to blight.—Wichita, Kan. Beacon.

THE PECAN

Texas Pecan Growers

Brownwood, Texas, May 12—The Texas Pecan Growers Association meets here May 28th for the three days session. During the session the federal pecan insectory and laboratory for pecan insect investigation will be dedicated with suitable ceremonies. The city council of Brownwood some time ago set aside a large area of pecan timber land owned by the city along the banks of Pecan Bayou, for the use of the Federal government, and on March 2nd, a large number of trees were set out in addition to the orchard already on the land. A. I. Fabis, pecan insect expert, will be in charge of the work here and his investigations will cover a wide range of territory, in the Brownwood San Saba pecan area. The land was leased to the Federal government for a long term of years.

The Texas Pecan Growers Association was organized here in May 1921. W. M. White, an active business man of Mason was elected president and A. L. Marek, a young newspaper man of San Antonio, was elected secretary. The primary object sought in organizing was better marketing conditions. Owing to bad crop years the association has not had sufficient opportunity to put its marketing plans into operation, these plans being of a co-operative nature. H. G. Lucas, Brownwood, is now the president. Oscar Gray, Waxahachie, is the secretary.

There are 251 counties in Texas and pecan culture has been proven a safe venture in 201 of these counties.

The largest pecan tree in the world is said to be on the Colorado river in San Saba county, Texas, about 50 miles from Brownwood, this tree being about 100 feet in height and six feet in diameter. On good crop years it has been known to bear 1,100 pounds of pecans.

Just mention AMERICAN NUT JOURNAL.

MEMBERSHIP DRIVE

National Pecan Growers Association
The National Pecan Growers Association fee for membership is \$2.00 per year, with a student membership fee of \$1.00.

The subscription price for the American Nut Journal, official organ, is \$2.00 per year.

Note combination offer below.

REGULAR YEARLY RATES

Association Membership.....\$2.00
American Nut Journal..... 2.00

SPECIAL YEARLY RATES

Association Membership)
American Nut Journal } \$3.25

Address J. Lloyd Abbot, Sec'y.
Route 1, Spring Hill, Ala.

Central Alabama Association

President C. Kirkpatrick, of the Central Alabama Pecan Growers Association, says the association is planning to make a statewide drive for additional members this summer and will endeavor to market pecans grown by the members at a distinct advantage to them and at the same time at less cost to the consumer, through the National Pecan Growers Exchange with which the Central Alabama Association is affiliated.

O. K. Darden, Ardmore, Okla., has been re-elected president of the Oklahoma Pecan Growers Association. The officers are: Stanley Brown, vice-president, and C. E. Ringer, secretary-treasurer. Directors elected are: Doc Coffey, Wilson Newman, G. L. Dyer, C. G. Gill, Irl Hudson, Walter Colbert, J. R. Riddle, Darden, Ringer and Brown.



H. G. LUCAS, Brownwood, Tex.
President Texas Pecan Growers Association

Women Make \$1,000

Abbeville, S. C., May 1—There is money in growing pecans for sale in this state. Over a thousand dollars has been cleared this winter on the sale of nuts by Mrs. George Penney, Mrs. D. A. Rogers, Mrs. W. D. Wilson and Mrs. C. P. Townsend, all within a radius of one hundred yards. Their residences are at the lower end of South Main street, and the pecan trees are being used as shade trees in the back yards at the time they are producing nuts.

The first of these seedlings were brought to Abbeville by Hiram W. Lawson. Mr. Lawson came to South Carolina from New York in 1844, and brought the nuts to his sweetheart, Miss Frances Jane Shillito, who planted them along the fence at the back of the garden. The seedlings grew fine, and as they became bearing trees the jay birds carried the seeds. A jay bird will crack a paper shell pecan nut with his bill, and in eating the inside of the nut will lose part of it, and this sprouts immediately in the springtime.

Large sales were made here this winter. Mrs. W. D. Wilson received an order for \$100 worth at one time, and this was later supplemented by another order from the same party. The party placing the hundred dollar orders used the nuts instead of eating meat and claims that diet has entirely cured

LITERATURE

A valuable contribution to pecan literature is "The Pecan in Texas," bulletin 73 of the Texas Department of Agriculture, by J. A. Burkett, nut specialist. Mr. Burkett is a noted authority on the pecan. He has done an enormous amount of work in behalf of pecan culture in the Southwest. Readers of the Journal have repeatedly benefited by articles from his pen.

The bulletin of 146 pages, profusely illustrated discusses the history, importance and economic value of the pecan, describing Texas conditions, pecan streams, soils, orchards, production, insects, diseases, grafts, propagation, etc. The whole subject of Texas pecans, a highly important and interesting one, is treated intelligently and authoritatively.

Mr. Burkett has supplemented his own knowledge, based upon long and wide experience, with the opinions of growers as to the best varieties of pecans for Texas and with articles on particular phases; as, for instance: Diseases of the pecan, by J. M. Del Curto, plant pathologist of the state department; Suggested standards, by E. W. Cole, director of markets; pecan insects, by J. S. Woodward, first assistant entomologist; reasons for planting pecans, by Judge Charles L. Edwards; recipes, by H. G. Lucas; cost of a fifty-acre pecan grove, by T. H. Ridgeway; pecan production in the U. S., by R. E. Yantis. Growers and handlers, not only in Texas, but in the entire country, are indebted to Mr. Burkett for this compilation.

Just mention AMERICAN NUT JOURNAL

him of indigestion. Mrs. C. P. Townsend has made a neat sum selling shelled pecan nuts in the cities. She has a sheller and receives 90 cents a pound for shelled pecans. Mrs. D. A. Rogers disposed of her surplus in the city of Atlanta, and as far as Boston; while Mrs. George Penney received a good price for hers both at home and abroad.

A NEW BOOK! NUT GROWING By Robert T. Morris

The latest and only up to date book on the newest and one of the most important branches of Horticulture, giving a broad survey of a rapidly growing industry. Detailed explanation of successful methods of propagation and the new process of grafting with the use of paraffin; illustrated.

An invaluable work for all nut growers.

Price. \$2.65, Postpaid

AMERICAN FRUITS PUB'G. COMPANY
39 State Street, Rochester, N. Y.

The Logical Market Place for Sale of Nuts The Advertising Columns of the American Nut Journal Chief Exponent of the Trade.

Hundreds of Readers of this Journal Ask for Pecan Nuts in Moderate Quantity at Prices Less Than the Retail Price per Pound in Northern Markets. They Would Be Eager Buyers if They Knew Where to Apply. If There is Any Surplus at Any Time, the Advertising Columns of this

AMERICAN NUT JOURNAL

Journal Will Dispose of It. Rate, \$2.80 per Inch. Announcement Should be Maintained the Year Around (Yearly Rate, less than 60 Cents per Inch a Week) to Secure Best Results. Make Your Name a Household Word Wherever Pecans Are Wanted. Make It Easy To Procure Them.

P. O. Box 124

ROCHESTER, N. Y.

American Fruits Company's Library Opportunities

PRACTICAL BOOKS ON HORTICULTURE, NUT GROWING, NURSERY PRACTICE

Any of the following books will be sent on receipt of price by AMERICAN FRUITS PUB'G CO.,
123-125 Ellwanger & Barry Bldg., ROCHESTER, N. Y. Prices subject to change.

American Apple Orchard By F. A. Waugh.....	\$1.90	Irrigation for the Orchard—Stewart.....	1.75	Plant Propagation; Greenhouse and Nursery Practice—M. G. Kains..	2.40
American Fruit Culturist By John J. Thomas.....	3.65	Land Drainage—Joseph H. Jeffrey..	2.15	Plant Physiology—B. M. Duggar....	3.00
American Fruit Farm—F. N. Thorpe...	2.65	Landscape Gardening—Art of Land- scape Architecture—Parsons....	3.65	Pomology, Text-book of—Gourley...	2.75
American Grape Culture—Munson..	2.65	Landscape Gardening—Downing's Famous Work—10th Edition— Revised by Waugh.....	6.00	Practical Forestry—A. S. Fuller...	2.15
American Grape Growing and Wine Making—George Husmann	2.15	Landscape Gardening—House and Garden's Book of Gardens, 9½ x 12½, 400 Illustrations.....	5.15	Practical Fruit Grower—Maynard...	1.00
American Horticultural Manual By Budd-Hansen, two vols....	3.30	Landscape Gardening—Kemp—Re- vised by F. A. Waugh.....	2.15	Practical Tree Repair—Peets.....	2.65
American Peach Orchard—Waugh...	1.90	Landscape Gardening—Maynard....	2.65	Principles of Agriculture—Bailey...	2.00
Bulbs and Tuberous-Rooted Plants...	2.15	Landscape Gardening—The Small Place—By Elsa Rehmann.....	3.65	Productive Orchard—F. C. Sears...	2.65
Bush Fruits—By F. W. Card.....	3.15	Landscape Gardening—Cridland....	2.65	Principles of Fruit Growing—Bailey	2.65
California Fruits and How to Grow Them—E. J. Wickson, A. M....	4.15	Landscape Gardening—The Com- plete Garden—Albert D. Taylor...	6.15	Principles of Pruning—Kains.....	2.65
Citrus Fruits—J. E. Coit.....	3.40	Landscape Gardening—O. C. Simonds	6.15	Pruning Manual—By L. H. Bailey...	2.65
Commercial Apple Industry of North America.....	3.65	Manual American Grape Growing— Hedrick	3.40	Putnam's Garden Hand Book.....	2.00
Cyclopedia of Hardy Fruits By U. P. Hedrick.....	6.20	Making Horticulture Pay—Kains....	1.90	Quince Culture—W. W. Meech.....	1.35
Dwarf Fruit Trees—Waugh.....	1.00	Manual of Fruit Diseases—L. R. Hessler, H. H. Whetzel.....	3.15	How To Grow Roses—Robert Pyle...	1.50
Farm Bureau Movement—O. M. Kille	2.15	Manual of Fruit Insects—M. V. Slingerland, C. R. Crosby.....	3.90	Rose—H. B. Ellwanger.....	1.40
Fertilizers and Crops By Dr. L. L. Van Slyke.....	3.40	Manual of Gardening—L. H. Bailey	3.40	Sales Promotion By Mail.....	2.15
Fertilizers—Edward B. Voorhees...	2.65	Manual Tropical and Sub-tropical Fruits—Popenoe	3.90	Small Fruit Culturist—A. S. Fuller..	1.75
Field Notes on Apple Culture By Dr. L. H. Bailey.....	.90	Manual of Tree Diseases—Rankin...	3.40	Soils—E. W. Hilgard.....	4.25
First Principles of Soil Fertility By Alfred Vivian.....	1.50	Manual of Vegetable Garden Insects By Crosby & Leonard.....	2.90	Soils—Lyon-Fippin-Buckman	3.40
Forests of N. Y. State—Recknagel...	2.65	Manures and Fertilizers—Wheeler..	2.65	Soils—F. H. King.....	2.40
Fruit Growing in Arid Regions....	2.75	Modern Fruit Marketing—Brown....	1.90	Soils—By Charles W. Burkett.....	1.90
Fruit Garden—P. Barry.....	2.40	Modern Propagation Tree Fruits— B. S. Brown.....	1.65	Spraying Crops—C. M. Weed.....	1.00
Fruit Harvesting, Marketing—Waugh	1.90	Nature's Garden—Neltje Blanchan..	6.30	Standard Cyclopedia of Horticulture Edited by L. H. Bailey. In six vol- umes. 3,600 pages. 4,000 text engravings. 96 sepia halftones. 500 collaborators. May be had on installment payments.....	40.00
Fruit Insects—Crosby.....	3.90	Nursery Manual—Dr. L. H. Bailey...	2.65	Strawberry in North America—S. W. Fletcher	1.90
Fumigation Methods.....	1.90	Natural Style Landscaping—Waugh	2.65	Strawberry Growing—S. W. Fletcher	2.40
Gardening for Pleasure—Henderson..	2.15	Nut Culturist—Andrew S. Fuller...	2.15	Success in the Suburbs—John R. Mc- Mahon	2.15
Gardening for Profit—Henderson....	2.15	Nut Growing: Latest Information; Guide to Propagating—By Rob- ert T. Morris.....	2.65	Successful Fruit Culture—Maynard	1.75
Grape Growers Guide—Chorlton....	1.65	Old Time Gardens—Alice M. Earle..	2.65	Surgeon's Philosophy—Dr. R. T. Morris	3.15
Grape Culturist—A. S. Fuller.....	2.15	Ornamental Gardening—E. A. Long..	2.15	Systematic Pomology—Waugh.....	1.90
Greenhouse Construction—Taft.....	2.40	Principles of Floriculture.....	3.40	Ten Acres Enough—I. P. Roberts...	1.75
Greenhouse Management—Taft.....	2.40	Parsons on the Rose—Parsons.....	1.75	Wild Fruits, How to Know—Peterson	2.15
Hedges, Windbreaks, Shelters.....	1.00	Peach Culture—J. A. Fulton.....	1.65	Wind and Weather—McAdie.....	1.15
Roses—How to Grow—Robert Pyle...	1.50	Peach Growing—By H. P. Gould....	2.65		
Injurious Insects—F. L. Washburn...	2.65	Pear Culture for Profit—Quinn....	1.35		
Insects of Economic Importance— Herrick	2.15	Picturesque Gardens—Henderson...	2.25		
Insect Book—Dr. L. O. Howard....	6.30	Plant Breeding—By Dr. L. H. Bailey	3.40		
Insects and Insecticides—Weed....	2.15				
Insect Pests of Farm, Orchard and Garden—Sanderson and Peairs...	4.65				
Insecticides and Fungicides.....	3.20				
Irrigation Farming—L. M. Wilcox...	2.40				

A paper which gives the best value for the money to the reader will give the best value to the advertiser as well. I don't think there is any argument about the soundness of this view.—H. Dumont, Chicazo, Ill., in Printer's Ink.

A paper which gives the best value for the money to the reader will give the best value to the advertiser as well. I don't think there is any argument about the soundness of this view.—H. Dumont, Chicalo, Ill., in Printer's Ink.

WANTED Names and Addresses of Owners of Groves of Native Nut Trees in Northern States.

In the interest of Northern Nut Culture this Journal desires the above information to serve as a basis for extension of Nut Culture.

Readers will confer a favor by sending us lists of names and addresses of those who have stands of nut trees on their property, (with some account of productivity if practicable). Black walnut, English walnut, butternut, hickory, chestnut, filbert, etc.

American Nut Journal P.O. Box 124 Rochester, N. Y.

BUDED and GRAFTED Nut Trees

Start right with my hardy Pennsylvania grown trees and be assured of success. Attractive Catalogue Free.

I have this season a fine lot of stake trained Pecan, English Walnut, Black Walnut and Persimmon trees budded on root pruned transplanted stocks, that will please you and that will transplant easily and early. Write for catalogue.

J. F. JONES, The Nut Specialist
LANCASTER, PA.

THIS SPACE
\$2.50 Per Month Under Yearly Contract
Under less than yearly term:
\$2.80 Per Month

PECANS
We are the pioneer growers of budded and grafted pecans in the South. Have a complete stock of the leading standard varieties. Can furnish trees we know will please and give satisfactory results. Catalog free.
INTERSTATE NURSERIES
C. M. Griffing & Co. Props., Jacksonville, Fla.

Texas Pecan Nursery
Arp, Texas
THE PEOPLE THAT GROW WELL-ROOTED PECAN TREES

CONSULTING TROPICAL HORTICULTURIST and TREE EXPERT

HARVEY C. STILES CHOCOLATE BAYOU, TEXAS

Specializing in Pecans, Grapefruit, Avocados, and Landscape Development. Long experienced expert for—and present active director of—many such large projects throughout tropics and semi-tropics. Examinations, Reports, Plans, Specifications and Estimates. Correspondence suggested.

Have You Nuts to Sell?

HICKORY NUTS BLACK WALNUTS
BUTTERNUTS CHESTNUTS

Hundreds of buyers are asking where the nuts can be obtained in quantity. Place your Sale Advertisement in the AMERICAN NUT JOURNAL for quick returns. \$2.80 per inch.

39 State St., Rochester, N. Y.

American Nut Journal

**DEVOTED TO NUT GROWING INTERESTS
GENERALLY THROUGHOUT THE AMERICAS**

Vol. XVIII. No. 6

JUNE, 1923

Per Copy 20c.



A. CLARKE SNEDEKER, Blackshear, Ga.
President Georgia-Florida Pecan Growers' Association

39 STATE ST.



ROCHESTER, N. Y.

American Fruits Publishing Co.

A Proposition for Black Walnut Culture on a Large Scale

DEAR NUT TREE GROWER:

After years of search I have secured the three improved varieties of black walnuts that cover the entire field. These are:

The LEWIS black walnut, a table nut in a class by itself, and pronounced by experts superior in quality to Persian (English) walnuts and with easy cleavage and hardy.

The MORRIS black walnut, (named for Dr. Robt. T. Morris,) for confectionery and bakery trade, excellent quality, of easy cleavage and hardy, and

The GLORY black walnut for the figured or curly grain of the wood. Single highly figured black walnut trees have sold for \$4,000 each.

I own these three new varieties of black walnuts and am propagating the trees by budding and grafting according to the most modern methods. The nursery trees of these varieties of black walnuts will be sold under a sales contract or agreement similar to those used with the Golden Delicious apple and the Temple orange, in which, as a part of the purchase consideration, the buyer promises not to propagate these trees or permit anyone else to do so from his trees for thirty (30) years.

I am propagating these new varieties of black walnuts and my intention was to keep this nursery business for myself and go ahead slowly in the work. I was formerly in the tree nursery business for several years and know it can be made very profitable if run on a volume of production basis.

But the demand for these trees has become so large since the descriptions of them have appeared in the *American Nut Journal*, *American Fruit Growers Magazine*, *American Fruits*, and other publications within the last few weeks, that I am simply deluged with demands for these trees far beyond my capacity to supply. Could have sold several orders for 1000 to 2000 trees each of the Lewis black walnut alone, besides many smaller orders. One man offered \$10 each for a considerable number of these trees.

I want to make this my life work and the field and its possibilities are exceedingly large.

So to meet this demand for these trees more rapidly I have decided to form a company and let others join me on equal terms to get additional capital to swing this great opportunity at once in a big way.

I wish persons associated with me as shareholders who are interested in nut tree culture and who know something about the immense future of nut tree growing in those parts of the United States nearest to the great centers of population, where there are more than 100 million acres of land now idle or of small value that can be made the most profitable land of all by planting to these improved varieties of black walnuts.

In the primary and secondary commercial black walnut areas alone there are about 40 million acres of lands level and very fertile but of small value now, because subject to occasional over-flows, but these lands are the natural home of the black walnut. This is more than enough to make a state the size of Illinois or Iowa.

The United States Department of Agriculture states that there are 81 million acres of land mostly in the East and Central West now idle and fit only for trees. At least half of this land is suitable for black walnuts. At 15 trees per acre 40 million acres will take 600 million black walnut trees. The overflow lands will need as many more.

There are four and a half million farmers in the United States and if only two million of them plant 100 walnut trees each in waste corners of their farms and along their farm lines and highways that will use 200 million trees.

These three purposes will take nearly a billion and a half trees!

This is not figuring black walnut groves on cultivable land, and other purposes. The leading nut tree authority in Iowa advises planting black walnuts on the best land in Iowa, because he says that he knows of nothing that will pay so well on the best land, and this is doubly true of these greatly improved new black walnuts.

The United States imports about \$1,000,000 a week worth of nuts from foreign countries. With these better varieties of black walnuts we can produce these nuts at home on land now idle and so of small value.

A pecan nursery in Georgia is rated at \$1,000,000 and the named sorts of pecans did it and they are a business of only a dozen years or so.

You know that budded or grafted nut trees sell at higher prices than any other class of trees and still the demand exceeds the supply.

With these improved kinds of black walnuts there is even a greater opportunity, because the field is so very much larger.

This will be a small company with compact capital. It will take years to catch up with demand for these trees. Only one-tenth of a billion and a half trees is 150 million trees. Or at 150,000 trees per year it would take 100 years to produce that number of trees.

There are other and even larger opportunities for profits in this enterprise besides the production of nursery stock, because it is a new industry with immense profit possibilities.

Write me at once for full details and special offer for getting in on the ground floor as a Founder of this new industry.

H. R. MOSNAT,

10910 Prospect Avenue,
Morgan Park, Cook Co., Illinois

PROFITABLE PECAN TREES

By careful methods of bud selection and culture we grow trees that yield Profitable Nut Crops. This fact is proven in our own large orchards and in the orchards of our customers. Our trees make satisfied customers.

We can supply all standard varieties. Make your reservations early to insure delivery when wanted.

Summit Nurseries

Monticello, Florida.

PECAN TREES

100,000 TREES—STANDARD VARIETIES
WE GROW NOTHING BUT PECAN TREES
HIGH QUALITY—SERVICE THE BEST

SIMPSON NURSERY CO., MONTICELLO, FLA

THIS SPACE

\$2.50 Per Month Under yearly
Contract

Under less than yearly term:
\$2.80 Per Month

FOR SALE

5 ACRE PECAN GROVE LOCATED IN THE UNITED PECAN GROVES AT PUTNEY, GEORGIA. TREES PLANTED 9 YEARS AND IN GOOD CONDITION—UNDER CARE OF PAPER SHELL PECAN GROWERS ASSOCIATION.

PRICE, \$2,500—A BARGAIN FOR QUICK SALE. ADDRESS G. E. HADDEN, 6016 HAYES AVE., LOS ANGELES, CALIF.

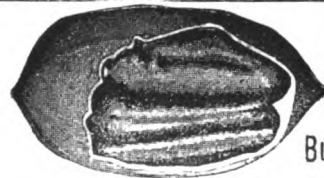
Budded and Grafted

HARDY NORTHERN NUT TREES

Best varieties, grown in natural nut soil. Send for catalog. Have your seedling nut trees topworked to these fine varieties.

Information and estimate on request.

INDIANA NUT NURSERY
Rockport. J. F. Wilkinson, Prop. Indiana



NEW EDITION FREE

A practical guide showing how to bud pecans. Tells how to grow trees 12 inches in diameter by the end of the 8th year, which yielded 400 lbs. nuts per acre.

Trees, Nuts, Groves for sale direct without agent at attractive reduced prices
B. W. STONE, Thomasville, Ga

ORCHARD OWNERS OF THE SOUTH-EAST AND GULF STATES

Reports furnished on pecan and fruit orchards, giving variety, age, size and condition of each tree; also notes on general conditions and needs of orchards. Care and management of orchards a specialty.

HORTICULTURISTS INCORPORATED
6th Floor, Exchange Bank Building
Albany, Ga.

PECAN TREES

We Grow Them Right
We Pack Them Tight
We Price Them Right

Southern Nut Tree Nurseries,
THOMASVILLE, GA.

SUCCESS

and other leading varieties. Also citrus
BECHTEL PECAN NURSERIES

Ocean Springs, Miss.

PECAN TREES

Plant them this year! Buy direct from nursery and save agent's profit. All standard varieties; quality and service the best. Write us for prices.

FLORIDA NURSERIES

W. W. Bassett, Prop., Monticello, Fla.

AMERICAN NUT JOURNAL CHIEF EXPONENT OF AMERICAN NUT INDUSTRY

Of National Circulation

Covering Every Phase of Nut Culture

Subscription: - - \$2.00 Per Year
Advertising: - - \$2.80 Per Inch

Official Journal { National Pecan Growers Association
Northern Nut Growers Association

AMERICAN FRUITS PUBLISHING COMPANY

39 State Street, Rochester, N. Y.

AMERICAN NUT JOURNAL --- JUNE, 1923

EDITORIAL DEPARTMENT—Communications on any subject connected with Nut Growing and Distribution are cordially invited by the editor; also articles on this subject. We shall be pleased to reproduce photographs of trees of interest, methods and scenes connected with the Nut Industry; portraits of individuals, etc. Suggestions are cordially welcomed.

ADVERTISING—Advertising forms close on the 10th of each month. If proofs are wanted, copy should be in hand on the 1st.

Advertising rate: 30 cents per agate line; \$2.50 per column inch for any amount of space.

Advertisements that do not represent reliable concerns will not be accepted.

SUBSCRIPTIONS—The "American Nut Journal" will be sent to any address in the United States for \$2.00 a year; to Canada or abroad for \$2.50 a year. Three years: In United States, \$5.00; Canada, \$6.50.

Add ten cents for exchange unless bank draft, express or postal money order is used.

WHAT THIS JOURNAL STANDS FOR—Reliable information on all phases of the Nut Industry. It is for the advancement of Nut Growing in general; it is in no way confined to the interest of a particular kind of nuts, nor of a particular section. It is broad in scope and absolutely independent. The aim of "The American Nut Journal" is to stimulate thousands of persons into developing interest in one of the greatest food supplies of the future—to line the roadsides and fill the waste places with trees of a sort which yield dollars worth of fruit every year instead of the mere bunches of leaves resulting from present shade and ornamental planting. At the same time it will record the progress of the industry, the latest descriptions in the note book of the biologist and plant physiologist, the rapidly expanding knowledge of methods, the increasing acreage, and in short the news as it develops of an industry whose importance is recognized by an increasing number of persons in all sections.

Entered as second-class mail matter June 6, 1914, at the post office at Rochester, N. Y., under the Act of March 3, 1879.

AMERICAN FRUITS PUBLISHING COMPANY INC.

Ralph T. Olcott, Editor and Manager

121-123-125 Ellwanger & Barry Bldg., Rochester, N. Y.

Classified Business Announcements In This Issue.

Bassett, W. W.	Pecan Trees	70	Mosnat, H. R.	Black Walnut Orchard.....	70
Bechtel's Pecan Nurseries...	Grafted Pecan Trees.....	70	"Nut Growing"	New Book	83
Florida Nurseries	Pecan Trees	70	Nut Information	Special Topics	71
Griffing & Co., C. M.	Pecan Trees	84	Nuts as Staple Food.....	Dr. J. H. Kellogg.....	71
Hadden, G. E.	Pecan Grove for Sale.....	70	"Nut Trees for the North".	Expert Advice	71
Horticulturists, Inc.	Southern Pecan Experts.....	70	Pecan Farm for Sale.....	At Albany, Ga.....	82
Indiana Nut Nursery.....	Northern Pecan Trees.....	70	Simpson Nursery Co.....	High Grade Pecan Trees.....	70
Inter-State Nurseries	Pioneer Pecan Growers.....	84	Southern Nut Tree Nurseries	Pecan Trees	70
Jacoviac, Maurice	European Walnuts	82	Stone, B. W.	Pecan Trees, Nuts, Groves.....	70
Jones, J. F.	Grafted Pecan Trees.....	84	Summit Nurseries	High Grade Pecan Trees.....	70
Lancaster Nut Nurseries....	Northern Nut Trees.....	68	Texas Pecan Nursery	Budded Pecan Trees.....	84
Manual of Grafting.....	Biederman Method	82	Wilkinson, J. F.	Grafted Pecan Trees.....	70

IMPORTS OF NUTS INTO THE UNITED STATES, FOR CONSUMPTION, DURING THE LAST THIRTEEN YEARS

(Compiled by Bureau of Commerce and Navigation, Department of Commerce, Especially for the "American Nut Journal.")

KIND	1909	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919	1920	1921
Almonds—not shelled.....lbs.	2,120,632	6,810,056	3,762,654	5,242,563	2,363,860	5,501,059	4,684,594	2,363,369	4,901,168	6,149,374	7,482,538	6,460,732	5,068,215
Shelled.....lbs.	8,538,054	10,495,750	12,160,638	11,692,988	12,535,057	13,896,621	12,168,153	13,210,668	19,160,258	21,544,757	28,007,908	18,769,628	21,672,634
Apricots and peach kernels lbs.	27,851	13,551	7,939	18,769	18,572	67,164	11,926	250,075				65,175	32,698
Coconuts in the shell.....Dollars	\$1,246,463	\$1,298,970	\$1,704,262	\$2,012,203	\$1,793,713	\$2,150,500	\$1,593,666	\$1,891,328	\$2,583,560	\$2,490,368	\$4,053,282	\$4,230,221	\$2,283,660
Coconut Meat broken or Copra not shredded, desiccated or prepared.....lbs.	21,742,518	20,830,539	38,081,984	61,505,787	34,283,592	44,459,158	88,680,382	108,507,765	247,043,127	430,649,332	258,637,781	215,188,461	189,320,950
Desiccated, shredded, cut or similarly prepared.....lbs.	5,161,602	5,985,308	6,961,850	5,396,465	6,826,065	9,307,924	5,866,806	7,947,380	10,491,796	20,269,909	29,637,674	30,631,029	35,633,497
Cream and Brazil.....bu.	409,644	461,496	277,679	21,601,008	11,933,139	11,431,531	12,453,319	12,489,217	16,230,023	11,282,068	14,076,338	13,035,436	17,102,046
Filberts—not shelled.....lbs.	7,365,837	10,026,961	10,064,987	8,375,880	8,596,278	10,36,072	10,922,248	10,003,552	16,468,547	7,432,524	16,747,349	14,966,364	14,092,336
Shelled.....lbs.	1,384,689	1,413,391	2,332,606	1,368,835	1,450,620	1,794,147	1,722,705	1,259,540	2,280,787	4,245,863	3,778,906	4,711,293	4,233,107
Marrons, crude.....lbs.	10,270,398	9,968,879	14,845,345	10,157,321	18,849,257	12,549,939	15,754,786	6,275,030			5,021,146	29,484,637	23,340,968
Olive nuts, ground.....Dollars	\$580	\$478	\$236	\$206	\$342	\$385	\$25	\$112	\$420			\$132	\$189
Palm and Palm Nut Kernels "	\$2,752	\$6,907	\$5,744	\$7,970	\$4,872	\$23,127	\$31,900	\$1,104,885	\$626,435	\$16,905,313	\$5,610,056	\$8,329,034	\$230,194
Peanuts or Ground Beans.....lbs.	7,326,371	11,297,172	11,055,823	12,660,433	12,140,612	17,298,778	14,075,387	9,623,411	7,710,082	1,970,797	5,667,354	7,222,486	4,903,677
Unshelled.....lbs.	1,302,919	16,049,919	7,821,505	3,127,829	7,823,173	21,819,101	11,695,507	18,739,888	27,548,928	67,746,831	24,179,687	103,552,486	39,406,853
Shelled.....lbs.	1,480,289	3,349,460	2,333,037	2,607,227	1,803,434	2,621,161	2,032,539	1,265,382	4,076,933			2,194,620	1,082,390
Pecans.....lbs.	17,432,885	23,269,974	21,146,116	22,208,845	16,363,046	16,134,211	20,988,326	22,610,418	17,177,992	3,304,003	21,235,078	17,339,096	31,821,639
Walnuts—not shelled.....lbs.	8,781,908	10,960,988	11,244,054	10,713,286	10,083,622	11,636,053	10,552,936	13,445,790	12,257,593	9,707,401	10,260,899	13,972,917	13,264,089
Shelled.....lbs.													
All other shelled or unshelled, not specially listed.....lbs.	9,938,337	3,584,544	2,962,663	3,050,989	3,600,056	7,426,313	3,272,492	2,772,589	2,769,634			3,763,973	3,880,676
Total of nuts imported.....Dollars	\$8,549,987	\$12,775,196	\$14,265,572	\$15,626,485	\$13,508,307	\$19,815,713	\$16,865,244	\$20,594,434	\$33,667,688	\$49,930,283	\$17,494,09	\$58,752,801	\$37,378,572

Nut Culture Information

Reprint folders on topics discussed in American Nut Journal. 10 Cents Each

Grafting and Budding the Walnut—U. S. Dept. Agriculture.
 Pecan Areas of the United States—W. P. Reed.
 Walnut Trees For New England—Dr. Robert T. Morris.
 Some Walnut Varieties—Dr. L. D. Batchelor.
 Chip Buds For Nut Trees—Charles L. Edwards.
 Grafting, Budding, Topworking—Dr. W. C. Deming.
 Breeding Chestnuts for Disease Control—U. S. Dept. Agr.
 Advent of Nuts as Staple Food—Dr. J. H. Kellogg.
 Underworking Nut Trees—Charles L. Edwards.
 The Ubiquitous Black Walnut—T. P. Littlepage.
 Average Yield of Pecan Orchard in S. W. Georgia.
 Value of Nuts As Food—Dr. W. C. Deming.
 Improved Black Walnut a Good Investment—Henry Stabler.
 Status of Pecan Industry—C. A. Reed, U. S. Nut Culturist.
 Sources of Supply of Hazel Nuts—Bulletin Imperial Institute.
 Top-Grafting the Walnut Tree—Ferd Groner.
 Black Walnut As a Meat Producer—Henry Stabler.
 \$2,000 an Acre by Top-working Pecan Trees—Stiles.
 Outline of Northern Nut Culture Activity—Dr. W. C. Deming.
 Establishing the Filbert Grove—George Dorris.
 Top-Working Northern Pecan Trees—J. F. Wilkinson.
 Nut Trees for Highways and Public Places—W. S. Linton.

American Nut Culture—24-page Pamphlet Survey.
 East Texans Reap Fortunes on Pecans.
 Hazel Blight—Dr. Robert T. Morris.
 Co-operating in Marketing Pecans—William P. Bullard.
 Cost and Development Pecan Unit Orchards—J. M. Patterson.
 Why Pecan Trees Bear Alternate Years—C. A. Reed.
 List of Nut Trees for Northern Planting—W. G. Bixby.
 Future of Nut Growing—Dr. Robert T. Morris.
 Franquette Walnut Orcharding Pays Well—Turk.
 American Nut Industry—C. A. Reed, Nut Culturist.
 What Nuts to Plant in Northern States.
 Pecan Rosette; Practical Treatment—W. A. Weaver.
 English Walnut: Where To Plant It.
 Nut Tree Grafting by an Easy Method—Dr. Robert T. Morris.
 Purchase of Chestnut Tree With Reference to Blight—G. F. Gravatt.
 Quick Results in Pollenizing Pecans—E. E. Risien.
 Nut Trees to Reduce Food Costs—Chas. Lathrop Pack.
 How To Guard Against Faulty Nuts—Harvey C. Stiles.
 The Romance of the Pinon Nut Industry in New Mexico
 Soil Fertility; Fertilizer Problems in Pecan Culture—J. J. Skinner,
 U. S. Department Agriculture.
 The Future of the American Grown Filbert—Richard H. Turk.
 The Future of Nut Growing—Dr. Robert T. Morris.
 The Lewis Hardy Black Walnut—H. R. Mosnat.

AMERICAN FRUITS PUBLISHING CO., 39 State Street, Rochester, N. Y.

Georgia-Florida Pecan Growers In Annual Session

Large Attendance and Marked Interest in Discussion of Many Practical Topics—Marketing the Keynote—Co-operative and Mail Order Distribution—One Large Co-operative Association Urged—Case-Bearer Situation—New Members Enrolled—A. Clarke Snedeker Elected President—H. K. Miller Vice-President—At Albany, Ga., Next Year.

The 17th annual convention of the Georgia-Florida Pecan Growers Association was held May 22-23 at Waycross, Ga. The attendance was large and the interest keen. The practical program proved of great value to all present. In his opening remarks President J. M. Patterson said:

This is an association to promote fellowship and discuss ways and means of conserving the best interests of the pecan industry. We are not a judicial body—not yet a legislative body but we are organized for mutual helpfulness.

In framing the program for this convention your officers have given place on the program to what we considered the more vital problems confronting the pecan industry. The program is perhaps more extensive than in previous years but it is so because of the very absorbing importance of the topics scheduled to be treated.

The pressing problems are insects and diseases and marketing. Another item about which we are all anxious to know more than we know is pruning.

A. Clarke Snedeker—"I am particularly delighted that our president has stressed marketing. It is the most important vital problem which we face. If this organization with its individual experience and talent cannot reach a farther advanced stage in marketing it had better disband. We have a high average of intelligence in the association and if we buckle down we can go a long way towards finding the solution.

In a paper on cover crops, Otis Woodward, of the Coastal Plains Expt., Sta., advocated both summer and winter crops, favoring velvet beans for summer. There was a round table discussion in which Dr. McHatton of the Georgia State College of Agriculture, J. Slater Wight, of Cairo, and many others participated. Dr. McHatton pointed out that a winter legume prevented the disintegration and escape of the nitrogenous content, serving a similar purpose as the snow in northern sections. Both winter and summer crops should be plowed under, the farmer buying more seed each year.

Mr. Wight said winter and summer cover crops had increased the organic content of the soil in one grove one hundred percent and the productivity of the grove had been bettered. Mr. Wight pointed out, however that the pecan tree was slow to respond to treatment and that the result was not noticeable until the third successive year of two cover crops. He urged the growers to try out anything through a sufficiently long period to be sure of judgment upon it.

Jerome H. Brown, of Albany, Ga., presented a paper on "Mail Order Marketing of Pecans." He reviewed the history of selling pecans by mail and was of the opinion that the present marketing of pecans was due very largely to the foundations laid by those who distributed them by mail. Fifteen years ago the idea originated with Wight and Adler. Letters were mailed out, advertisements were placed in daily papers and magazines. Soon orders began to come in. Each year has shown an increase in distribution and now the paper

shell pecan is known in every state of the Union. Then the pecans were hand-graded and mailed in paper containers. Now they are mechanically graded and mailed in wooden boxes with steel bands. The mail order distributors are not speculators for they buy for cash. Every mail order distributor is especially careful of quality. They sell more than do the exchanges.

Professor Stuckey, of the Georgia Experiment Station, next told of some experiments being tried out to prevent undue evaporation while the trees were in transit



H. K. MILLER, Monticello, Fla.
Vice-Pres. Georgia-Florida Pecan Growers Association

from the nurseries to the orchards. Melted paraffin had been tried as a protective covering but as yet the Station is not in position to reach any conclusion except that there was a wastage in trees due to this evaporation.

Mr. Berckmans, of Augusta, for many years in the nursery business, said that for long distance shipments he always dipped the entire tree in heavy, tenacious clay and in that way the loss had been practically eliminated.

One member recommended soaking the trees in water for 24 hours before setting them out, if they had been in transit for a long time.

Mr. Kellar, of Putney, announced that a study of the questionnaire submitted to the members showed that the greatest difficulty regarded the most important task of the association to be an improvement in marketing.

C. A. Reed, of Washington, D. C., read a paper on "What is Known About Pruning Pecans." Mr. Reed emphasized eleven points: First, in transplanting a tree, cut off part of the tap root to within two and a half feet of the surface; second, at this time cut back the top in proportion to the amount of root; third, during the formative period cut back the top each year; fourth, prune so as to train the shape of the tree and its height; fifth, in the transition period cut back for compactness; sixth, when two leading branches start as a fork pinch one back; seventh, as the adult stage is reached cut only for sunlight and air; eighth, wounds heal most quickly in Feb-

ruary and March; ninth, in old trees cut back the main leaders one year and the smaller limbs the following year; tenth, summer pruning is devitalizing; eleventh, prune cautiously at all times. If in doubt do not cut.

An interesting round table discussion followed the reading of this paper, participated in by fifteen or twenty members.

J. B. Gill, of Thomasville, gave an interesting talk on the "Pecan Case Bearer" situation. Mr. Gill showed that the distribution of this pest was very scattered, that its maximum reported destructiveness had been 40 percent, that parasites, notably the pecan fly and a four-winged fly assisted in keeping it down, and that the best known remedy at this time was a spray of arsenate of lead prior to the entry into the nut by the case bearer.

A paper on pecan scab by J. B. Demaree, of the U. S. Dept. of Agr., was read by Secretary Wight.

President Patterson announced the following committees:

Marketing—Simmons, Small and Simpson.

Time and Place—Stone, Winn and Hawkins.

Auditing—McGregor, Wells and Clayton.
Resolutions—McHatton, Turner and Jarnagin.

Nominations—Simmons, Burton and McElroy.

A. Clarke Snedeker, Blackshear, Ga., was unanimously elected president of the association. In announcing the result of the election President Patterson took occasion to pay a high tribute to the service rendered the pecan industry during the past twelve years by Mr. Snedeker.

The other officers elected are H. J. Miller, vice-president; J. Slater Wight, secretary-treasurer; C. A. Simpson, R. B. Small, W. B. Born, A. J. James executive committee.

The association will hold its next annual meeting at Albany on May 23-24, 1924.

The association adopted a resolution to pay the secretary-treasurer a salary for last year and the coming year.

After the regular convention sessions the members in automobiles made the rounds of Ware and Pierce's pecan groves and saw exactly how it has actually been done, visiting the groves of Mr. Snedeker, A. J. Strickland, Dr. W. P. Williams, W. T. Duvall, W. H. Whitbeck, in and near Blackshear, and Dan Lott in Waycross.

At the country home of the newly elected president the party was entertained at luncheon under a magnificent grove of pecan trees. Mr. and Mrs. Snedeker, host and hostess. Several speeches were made and Mr. Snedeker, who came from the West twelve years ago, declared that the Savannah Morning News and its management had been of great help to him in his industry, the advice of the Savannah newspaper and its manager determining him to go into the business of growing pecans and encourag-

Co-operative Marketing of Improved Varieties of Pecans

Address by President J. M. Patterson at the Annual Convention of the Georgia-Florida Pecan Growers' Association—Only a Small Percentage of Growers Are Marketing Through Associations—Suggestions That All Interested Should Get Together for the Creation of One Large Co-operative Organization—A Uniform Standard of Grades and Prices Highly Essential.

The pecan industry is still in its swaddling clothes. It is a very husky youngster but it is still a youngster. What it will be when it has fully developed, no one can say. It promises splendid results, but it calls for brains—eternal vigilance. It is temporarily embarrassed by some insect pests and fungus troubles but every commercial fruit has in the course of its development been face to face with similar obstacles. That means of control will be found which are not prohibitive in cost, we are confident. We are simply traveling the same path that has been traveled by the apple growers, the peach growers and the growers of practically every commercial fruit. With the hearty and skilled aid of the Federal Department of Agriculture we are sure to find a satisfactory means of control of insects and diseases.

As to proper method of pruning, we know very little and are anxiously waiting to be instructed.

CO-OPERATIVE MARKETING

Our marketing problem is one that has not been solved. A very small percent of growers market through any of our co-operative associations.

The time has arrived when if the growers are to be spared a season of market disaster, we shall all have to honestly face the facts regardless of self interest, and solely with a view to the general good of pecan growers. Co-operative marketing is the only salvation of agriculture in all its branches. No doubt, we all agree on this. And yet, we know that not all co-operative marketing associations have been or will be successful.

The Department of Agriculture has made a survey of co-operatives. The conclusions from the survey are that some co-operatives fail for the same reasons that private business men and co-operatives go broke. Of 243 co-operatives which have gone out of business or are in serious trouble insufficient volume of business was the cause in 200 cases. This was complicated by insufficient management in 148 cases. Insufficient capital was a contributing cause in 73 failures and over-extension of credit put thirty-five on the rocks.

The principle of co-operative marketing is ideal, but in spite of the ideal principle, the co-operative may fail.

The majority of pecan growers today are marketing to private consumer customers. This is a practice that has grown with the industry. Almost any small grower has found it comparatively easy to find private customers who would absorb a small crop.

This private marketing has been a boon to the industry. The nut was first introduced through private customers. Naturally the growers have gradually built up an

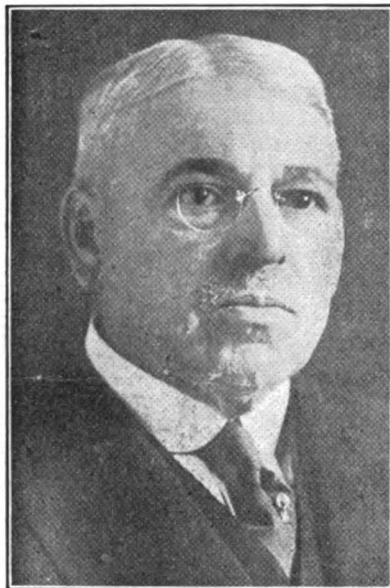
ing him through the years in which he had built up a successful business.

He began with an investment of \$3,500 and it is declared that today he would not think of taking \$50,000 for his grove. Mr. Snedeker declared that he knew of no spot, even in Dixieland, where the hazard of risk in farming and nut growing had been so nearly eliminated as in this favored section, nor did he know of any locality which was more conducive to the development of one mentally, morally and physically than this sun-kissed section of South Georgia, for which the Almighty had done so much in the way of climate, soil, seasons, rainfall, etc.

At this point there was a great clamoring for Mrs. Snedeker who was caring for the appetites of her guests. She appeared on the porch, expressed her pleasure in having them as guests, and extended to them a cordial invitation to visit them again. Judge Reed, Mr. Patterson and others made brief speeches.

even larger list of consumer customers. Naturally too, they are loth to discontinue supplying these customers. The next step, however, is the one that has caused and will yet cause great embarrassment.

It is but a step from the consumer customers to the retailer, and the grower when his crops exceed the demand of consumer customers, naturally turns to the retail dealer and right here is where the great danger lies. The grower sends to the retailer sample and perhaps quotes prices but in many cases ask for the best offer and the retailer immediately becomes a bear. Personally, I would like to see all our growers discontinue direct marketing except to consumer customers. Supply your consumer customers and then sell all your surplus through some marketing association or exchange. This would be a distinct step in advance and unless we all take that step in the very near future, we will one of these



J. M. PATTERSON, Putney, Ga.

not far distant years, experience complete demoralization of the pecan market. One step further should be taken at once. There are only a few marketing associations. These associations should get together at least on the questions of grades and prices. As the various existing marketing associations operate now, they are not co-operating but competing. There can be no co-operation between these various agencies until there is a uniform standard of grades and prices. There may be many different brands but the various brands, if the brand is a substitute for a grade, should have a fixed standard of grades. There may be various grades sold under the same brand. It is so in citrus fruits and apples. A brand is not necessarily a substitute for a grading standard. It may be so but when it is, the grade of nuts sold under a given brand should correspond with a certain fixed grade of other marketing agencies—where brand does not stand for a given grade or vice-versa.

As sensible business men, we ought to be able to sit down and work out these and kindred problems for the good of the trade. Eventually, we will have one marketing agency for paper-shell pecans—at least in Georgia, Florida, Alabama and Mississippi, and perhaps for all states producing the cultivated pecan. The sooner we steer our ship toward that harbor, the better for all of us. All other routes are strewn with rocks and reefs. As the president of one of the larger co-operative marketing associations, I desire in this public way to state that I am ready to meet the representatives of any and all other associations and exchanges and endeavor in the spirit of give and take to arrive at a uniform standard of grades and prices.

In my judgment, this convention could

do no greater service to the pecan industry than to set in motion the machinery that would seek to bring about this result.

We have the promise this year of a larger crop than we have ever had before. It may be that this year will see disaster—so far as marketing is concerned unless some sane and sensible steps are taken that will lead to co-operation among existing marketing agencies.

I am quite sure you will believe me when I say that I have thus briefly called your attention to the problem of marketing with the sole hope of serving the common good and all pecan growers. I would be wholly unworthy to preside over the proceedings of this convention had I not put the common—above and before any and every personal consideration and I assure you that I would not have referred to the marketing problem at all were not convinced that this is the foremost problem confronting you all today.

I conceive it to be the duty of the president of any organization to advise the members of that organization of the problem or problems which as he sees them are of chief concern to the members. With this conception of my privilege and duty I lay this marketing problem before you and respectfully suggest that steps such as you may deem wise be taken.

National Pecan Growers' Exchange

In accordance with a majority vote of the shareholders of the National Pecan Growers' Exchange at a meeting in Albany, Ga., March 9th, the charter has been amended to bring the corporation under the co-operative marketing act of the state of Georgia, under regulations which provide:

Membership in this Exchange shall be limited to persons, firms, co-partnerships, corporations or associations bona-fide interested in growing pecans as sole or part owner or as lessor, lessee or tenant; and when such interest on the part of the member bona-fide ceases then the membership shall cease also.

National Pecan Growers Exchange shall not have any capital stock but shall admit members into association through the medium of Marketing Agreement with or without payment of entrance or membership fees which shall be in such amounts as the board of Directors may determine from time to time; only Marketing Agreement holders shall be admitted to membership and called "Members" in the Exchange.

The voting power of the members shall be equal, each Member having one vote only; upon the termination of the Marketing Agreement of any Member, for any cause whatsoever, then and in that event all rights of such Member in said Exchange shall cease and such retiring Member shall have no further claim or demand against said Exchange, except for any nuts deposited with the Exchange by such Member which may at that time remain unsold or unaccounted for.

The movement for planting nut-bearing trees along the highways of this country is now getting a great boost from the government and farm magazines, and we expect it to sooner or later take a firm hold on our citizens around Hamburg.—Hamburg, Ark., Leader.

J. A. Evans, Arlington, Tex., has long been devoting special attention to the propagation of the pecan. For five years he was pecan specialist of the Texas Department of Agriculture.

A new laboratory for the study of pecan diseases and pests has been constructed on a 40-acre tract at Brownwood, Tex., at a cost of \$2,500, to be under the supervision of A. I. Fabis. Several Texas pecan Nurseries have donated pecan trees for the tract.

Texas Pecan Growers Association in Annual Session

A Big Program and a Lively Meeting—Many Practical Subjects Discussed—Strong Urge To Extend the Planting of Orchards of Improved Varieties of Pecans for Real Co-operative Work, While Disposing of the Native Crop to Best Advantage—To Conduct a Campaign to Teach the Value of Use of Pecans as Food the Year Around—Outstanding Addresses by W. B. Lanahan, Mrs. H. G. Lucas and A. W. Woodruff—W. P. Bullard on Co-operative Marketing.

The Texas Pecan Growers Association met in third annual convention, May 28-30, in Brownwood, Texas. Col. E. W. Kirkpatrick, president of the Texas Industrial Congress responded to the mayor's welcome. There was a representative attendance of growers of the state. Georgia, Arkansas and Maryland were represented.

President H. G. Lucas, in his address, urged greater appreciation of pecans and stimulating increased consumption. He showed need for research work in propagation, budding and insect control as a guide to the growers. Secretary O. S. Gray, of Waxahachie, reported on the work of the last year, and in co-operation with J. H. Burkett will meet specialists of the State Department of Agriculture to put the books of the previous organization in shape.

W. B. Lanahan, assistant director of the Texas A. & M. College Extension Service, said that Texas has fewer pecan trees at present than ten years ago. Georgia has six times as many bearing pecan trees as it had ten years ago. He said cultivated varieties sell for three times as high a price as wild nuts and urged that orchards be given closer attention. Instead of a return of \$3,500,000 from Texas pecans in 1919, three or four times that sum can be gotten through better care and varieties.

William P. Bullard, Albany, Ga., secretary of the National Pecan Growers' Exchange, told of the great strides made there. He said Georgia had about 100,000 acres of pecans, or 2,000,000 trees, with a crop, outlook of 40,000,000 pounds. East of the Mississippi River, he said, there are not less than 5,000,000 cultivated trees. He urged growers to unite in a great national marketing association.

M. E. Hays, secretary of the Texas Farm Bureau Federation, spoke on "The Marketing Question."

The association will conduct a campaign to teach the value of the use of pecans as food the year around, instead of mainly during the holiday season. Mrs. H. G. Lucas said that pecans contain only three per cent water, while beef and other meat has 75 per cent. She quoted authorities to prove that pecans are most highly concentrated food, perfectly balanced in digestible protein and available vitamins. She has found pecans especially suited to the demands of a concentrated non-bulky food of highest nutritive contents. She displayed various confections which attracted much interest.

The South will continue to be the chief pecan producing region in the United States for many years, said C. A. Reed, nut specialist of the United States Department of Agriculture although large plantings have been made in California, Arizona, Indiana, Missouri and Illinois. He decried the exploitation of worthless pecan orchards by unscrupulous companies which sell to uninformed city people.

Judge M. H. Gossett, president of the Federal Land Bank of Houston, explained the workings of the new intermediate credit facilities open to Texas farmers. A committee will represent the Texas Pecan Growers' Association to work out a basis acceptable to the Federal Land Bank, by which

pecan growers may obtain loans at low rates of interest.

A. W. Woodruff, prominent grower of San Saba, Tex., urged the development of budded and grafted pecan orchards to take the place of the native nuts.

Several hours were devoted to a discussion as to what constitutes the best size, shape and character of a pecan tree for orchard purposes.

H. G. Lucas brought a tree from a nursery for criticism. Valuable suggestions were made by Col. E. W. Kirkpatrick, of McKinney, Prof. J. A. Evans, of Arlington; Mr. Reed, of Washington, and many Texas growers. It was shown that in Georgia orchard trees of five to six feet were usually planted with a good root system. Cutting back the tops severely was not considered necessary under all conditions.

Dr. A. Caswell Ellis, of the University of



COL. E. W. KIRKPATRICK, McKinney, Tex.

Texas, said treatment of nursery pecan trees depend largely on soil and seasonal conditions where trees are to be planted. There is lack of real knowledge about the pecan and its reaction to cultivation. The Texas Pecan Growers' Association will try to assemble the information. An early morning budding demonstration at the home of J. T. McDonald was conducted by W. J. Milliken, of Bend. Tuesday afternoon spraying and pruning demonstrations in Capps' pecan orchard were attended by assembled growers, after which a trip of inspection was made to the Federal Pecan Insect Station, near Brownwood, under direction of C. A. Reed, who recently returned from China.

Col. P. M. Downs, of Temple, emphasized the need of planting pecans as shade trees. He said the city of Temple could have 50,000 pecan trees today instead of the hackberries planted forty years ago. He urged setting out good-sized trees on city lots and taking care of them. Colonel Downs had just come from a children's pecan budding day at San Saba, attended by several hundred boys and girls, all of whom learned how to bud and graft as well as to know pecan varieties.

If it relates to nut culture it should be in the AMERICAN NUT JOURNAL. Please send it in.

Co-Operative Marketing Pitfalls

Seven reasons for failure of co-operative marketing associations are given by Lloyd S. Tenny, assistant chief United States Bureau of Agricultural Economics:

1. The association must have a definite object in view.

2. The organization must be formed on a commodity basis. Both at home and abroad the outstanding successes in co-operative marketing have almost invariably confined their operations to a single agricultural product or to a group of products very closely allied.

3. There must be a sufficient volume of business to cover operating costs, and the business should be controlled under contract by the association. Many efforts in co-operation have failed because the farmers were willing enough to promise to sell their products through the association, but when the time to deliver these products came there appeared to be equally good reasons why the promises should not be fulfilled. It is not good business for a commercial organization to attempt to proceed without contracts.

4. Good management. No business can succeed without good management. The management is not only concerned with selling the products profitably, but must also recognize the individual member in the association and must function in such a manner as to satisfy this human element.

5. Proper accounting.

6. Educated membership. The members must have complete knowledge of the aims and conduct of the organization.

7. Self-perpetuating. The organization must be established and operated on lines that include and make use of the best thought and experience available; once organized it should be unnecessary to call on outside aid to re-establish policies, to provide a board of directors or management to conduct affairs.

"Practically all, if not all, of the failures in co-operative marketing violate one or more of these factors," Mr. Tenny said.

Summer Control For Pecan Scab

Pecan scab, a fungous disease which affects the leaves, twigs and nuts, of pecans, can be controlled by spraying with bordeaux mixture, according to Dr. O. F. Burger, of the Florida Experiment Station.

The disease may be identified by a dark green, smoky, superficial growth which is usually confined to rounded spots. On the leaves the spots are slightly raised and vary in size from very small to one-fourth of an inch in diameter. On the nuts the first appearance of the scab is similar to that on the leaves, except that the affected areas appear sunken in the nut tissue.

Spraying with bordeaux mixture for this disease is entirely a preventive measure, and does not act as a cure after the disease is once established. A definite spraying schedule will depend on the amount of rainfall in a given locality. If the season is very wet the interval between sprayings should be shortened to two weeks, whereas, if the season is moderately dry, this interval may be lengthened to as much as three or four weeks.

Bordeaux mixture, 4-4-50 formula, is recommended and it is advisable to use in addition 1 pound of rosin fish-oil soap to each 50 gallons of the preparation to increase its spreading and sticking qualities.

It is very important that this spraying for scab be kept up throughout the months of May, June and July; and, if conditions are favorable for the development of the fungus, one spraying should be given in August. If the orchard does become infested, all the fallen leaves and husks should be removed the following winter and a clean-up spray of bordeaux given before the growth starts in spring.

Texas Demonstration Day Marked Success

Pecan Demonstration Day for county schools of San Saba county, Texas, May 5th resulted in the formation of the San Saba County Pecan Club under the direction of County Agent S. F. Clark and Chairman A. W. Woodruff of the pecan committee of Commerce. A meeting of the school children and of prominent citizens of San Saba, Brownwood and other places and several officials was held at the Risien pecan grove adjoining the pecan Nursery of E. E. Risien & Son where the Parent-teacher Association had provided luncheon.

Following the registration checking, says the San Saba Star, little time was lost in getting to work. The official demonstrators were J. H. Burkett, Austin; G. E. Risien and E. H. Norris, San Saba; W. T. and D. F. Moore, W. J. Millican and Miss Veo Millican of Bend; J. E. Carroll of Richland Springs, and S. F. Clark, County Agent. The pupils were separated into eight groups to each of which one of the demonstrators was assigned, along with a bundle of bud-wood, and to his interested audience of boys and girls, fringed with grown people who were as interested as the pupils, the first steps in pecan improvement were taken in the form of patch budding. After each demonstrator had shown his goods to one group, he passed along to the next, and another demonstrator took his place in order that the pupils might see how different forms of patch budding were done.

After forty minutes of this, adjournment was taken to the lower end of the Risien Nursery where each demonstrator selected a young native tree and repeated his work so the boys and girls could see how it was actually done on the living tree where the buds were to remain. Buds of improved varieties were used for the tree work and these will be watched carefully and their progress noted.

A special demonstration was given by Miss Veo Millican to the girls present—and in passing it might be noted that there were more than half as many school girls present as there were boys—and in a deft manner this gifted young lady demonstrated that this kind of work can be performed by girls as well as by boys—better perhaps, as girls are likely to be more careful and neat than their brothers. The tree upon which she worked was budded with the new cross between the Burkett and Delmas pecans, and was tagged for reference. If the buds do well this tree will be named after Miss Millican.

After luncheon short talks were made by Col. Downs, Prof. Swallow, Prof. Del Curto, J. H. Burkett, A. I. Fabis and Capt. Wright Armstrong. In his talk Mr. Burkett, who is former secretary of the Texas Pecan Growers Association, stated that this was the second largest gathering that had ever attended a pecan meeting in Texas, being surpassed in point of numbers only by the meeting at Federicksburg last month, and exceeding the attendance at any annual convention of the Texas Pecan Growers Association.

Immediately after the speaking the budding contest for boys and girls was held. Budwood was provided, along with budding knives, waxed cloth and twine, and each contestant was required to cut and put on a bud in the manner shown by the demonstrator in the morning. Forty-two boys and girls took part in the contest, their work be-

ing judged by a committee composed of Prof. Swallow, W. T. Moore and E. H. Norris, with Secretary Bell as score-keeper. The result of this was that twenty-three prizes were awarded on classification of "exceedingly good," "very good" and "good." The first prizes were double-bladed budding knives, each accompanied by a packet of waxed cloth. The other prizes were small sums of money.

In the meantime a fine pecan tree, about a foot in diameter, had been selected at the lower part of the grounds, and adjournment to this place was taken where Prof. Fabis first took a picture of the tree, after which, under the direction of W. J. Millican, a number of the older boys proceeded to de-horn the specimen, illustrating the first step in working over big trees. After the work had been done, Prof. Fabis took another picture of the tree denuded of its branches.

About a hundred feet from the tree that was de-horned, stands an enormous pecan tree which has a branch-spread of one-hundred feet. The crowd was grouped under this old timer and Prof. Fabis took another picture.

Co-operation Necessary

In his address to the Texas Pecan Growers Association President H. G. Lucas said:

When the producers of pecans in Texas, both native and cultivated, are sure of a fair price and of a voice in determining what is a fair price then we shall see a wonderful development in the industry throughout the state. I am speaking now from the standpoint of a man who grows pecans to sell whether he has one hundred pounds or 50,000 or more pounds. It does not matter whether he grows native or improved varieties. He has the same marketing problem to face. If he grows native pecans he may have a number of trees that produce just as good pecans as the Schley, Stuart or any other variety and he should receive an adequate price for these as well as a fair price for all the other pecans he produces. A strong marketing exchange will of course establish grades and put standard uniform brands to the trade. This has been done in California with walnuts, almond and fruits and it is being done in Georgia with pecans.

The best pecans of whatever variety are packed under standards which are accepted by dealers and the small and inferior nuts are sold as shellers or are shelled and canned. This requires co-operation of the growers. Co-operation should be our slogan for this convention—co-operation in the exchange of ideas and experiences; co-operation in making known to the State and Federal authorities our urgent need for additional experimental work; co-operation in setting up a marketing exchange, owned and controlled by actual growers.

Texas Secretary's Recommendations

Secretary O. S. Gray in his report made the following recommendations, all of which were adopted:

Auditing in an efficient manner of the books of the association for the past two years.

Publication and distribution of the constitution and by-laws among the members of the association.

Prompt printing of the proceedings of each annual meeting and thorough distribution.

Boosting of the national idea of setting aside September of each year as pecan month.

Appointment of an official reporter for reporting proceedings and preparation for publication.

Prompt payment of all membership dues.

Just mention AMERICAN NUT JOURNAL.

THE PEANUT

The Georgia Peanut Growers Co-operative Association is underway. Paul J. Brown, Albany; W. J. Oliver, Shellman; J. P. McRee, Camilla; B. W. Stone, Thomasville, and T. B. McDowell, Blakely, composed the committee that districted the territory and their report was accepted by the organization committee which met June 1st to declare that the peanut campaign had succeeded. All of the original twenty-five counties except Ben Hill and Seminole were represented by one or more members of the county organization committees. The ten districts were laid out entirely in South Georgia, including the twenty-five original counties and a few contiguous counties that will be organized at an early date, like Webster and Quitman. Provision was made, however, for increasing the number of districts and the number of directors as soon as the new territory in Middle Georgia is organized, so that the growers in that section may have representation on the board.

Progress of the Peanut

There is possibly no other plant in existence that has come into commercial and agricultural prominence so quickly as the lowly peanut. The peanut has in the last few years evolved from the fence corner or patch to the broad fields. The peanut has stepped commercially from the small peanut roaster on the street to the eight-story peanut factories, where they are manufactured into many feeds and foods. It has been found that no other compound of fats will excel peanut oil for a shortening. Peanut candy is being eaten around the globe. An "olive" oil can be made of peanuts that can hardly be beaten.

The by-products of the peanut factory are very fine feeds for live stock. Peanut hay is one of the very best hays that has ever been discovered for a fat and milk producer. Every vestige of the peanut plant can be utilized as a feed or food. With but one fault to the peanut plant—and that is it is a soil robber when not placed right—it has served us well.—T. J. Fitzgerald in Dallas News Ex.

At Clinton, Conn.

J. J. Kelsey reports that on account of sickness he was unable to ship any trees this spring. Several orders he has will be filled in the fall. He says that in his Nursery and orchards the Japan and Japan-hybrids were the first to start new growth, the pecan trees second, the black walnuts next and the English walnuts last.

"Last fall," he says, "I hired men to help dig trees, but no one around here will take enough interest or seems to have intelligence enough to dig a tree properly, so hereafter I will dig or have them dug under my own direction."

"I am on the trail of a Jap-English hybrid that I believe will be the one commercial nut for the East. The Buddy nut, while exceptional in a good many ways, is a big disappointment in its cracking qualities. It does not crack out one-half as good as it was supposed to do; also the shell is too thick for commercial purposes."

Cracking Walnuts With a Can Opener.

All that is required is a simple twist of the wrist. The California Walnut Growers' Association has one machine to crack walnuts and another to seal them into air-tight glass jars and tins. Mrs. Consumer has them at her disposal in a jiffy by cutting out the soft tin lid.

The board of directors of the California Almond Growers Exchange has been increased to nine members. The board now consists of James Mills, Hamilton City; C. D. Hamilton, Banning; E. S. Norton, Sutter City; C. C. Woodworth, Lodi and John Trembath, Antioch; D. S. Nelson, Arbuckle; G. N. Talbot, Paso Robles; H. J. Wood, Oakdale and George W. Pierce, Davis.

American Nut Journal

COVERING NUT CULTURE

NORTH—SOUTH—EAST—WEST

AMERICAN FRUITS PUBLISHING CO., INC.
89 State Street - - - Rochester, N. Y.

RALPH T. OLCOTT, Editor and Manager
Official Journal Northern Nut Growers' Assn
Official Journal National Nut Growers' Assn

SUBSCRIPTION RATES

One Year, in advance.....\$2.00
Canada and Abroad..... 2.50
Single Copy20

ADVERTISING RATE

Per column inch.....\$2.80
Forms Close 10th of each month

ROCHESTER, N. Y. JUNE 1923

NUT ASSOCIATIONS

California Almond Growers' Exchange—
President, G. W. Pierce; manager, T. C. Tucker, 311 California St., San Francisco.

California Walnut Growers' Association—
President, C. C. Teague; secretary, W. T. Webber; manager, C. Thorpe, 1745 East Seventh St., Los Angeles, Cal.

Central Alabama Pecan Growers Association—
President, C. Kirkpatrick, Selma, Ala.; secy-treas., Morgan Richards, Selma, Ala.

Georgia-Florida Pecan Growers Association—
President, A. C. Snedeker, Blackshear, Ga.; vice-pres., H. K. Miller; sec'y-treas., J. S. Wight, Cairo, Ga.

National Pecan Growers Association—
Prest., Charles A. Simpson, Monticello, Fla.; vice-prest., J. M. Patterson, Putney, Ga.; and E. C. Butterfield, Winona, Tex.; secy., J. Lloyd Abbot, Spring Hill, Ala.; treas., J. Slater Wight, Cairo, Ga. 1923 meeting, Jacksonville, Fla., Oct. 2-4, 1923.

National Pecan Growers' Exchange—
President and manager, William P. Bullard, Albany, Ga.; vice-pres., J. B. Wight; secy-treas., A. D. Galt.

Northern Nut Growers' Association—
President, James S. McGlennon, Rochester, N. Y.; vice-prest., J. F. Jones, Lancaster, Pa.; treas., Willard G. Bixby, 32 Grand Ave., Baldwin, N. Y.; secy., Dr. W. C. Deming, 983 Main St., Hartford, Conn. 1923 convention, Washington, D. C., Sept. 26-28.

Oklahoma Pecan Growers Association—
President, O. K. Darden, Ardmore; secy-treas., C. E. Ringer.

Southeast Georgia Pecan Association—
President, Dr. W. H. Born; vice-prest., Col. G. H. Harris; secy, J. H. Girardeau, McRae, Ga.; treas., E. F. McRae.

Texas Pecan Growers' Association—Pres-
ident, H. G. Lucas, Brownwood; vice-prest., John P. Lee, San Angelo; Secretary, Oscar Gray, Waxahachie.

Western Nut Growers' Association—Pres-
ident, Ferd Groner, Hillsboro, Ore.; secy-treas., C. E. Schuster, Corvallis, Ore.

Practices What He Preaches

A. W. Woodruff, prominent pecan grower and secretary of the San Saba Pecan Co., San Saba, Texas, together with Dr. G. H. Wilson and S. F. Clark, also of San Saba, on May 1st purchased 90 acres of land located just a mile from the San Saba post office and court house which has been platted to five-acre tracts on which will be planted Nursery pecan trees of improved varieties, 12 to the acre, as soon as the season will permit this fall. They had to take 90 acres in order to include the 30 acres they are going to develop for themselves. The other five-acre tracts will be sold at the cost of buying the land and setting it out to improved pecan trees and caring for the trees until they come into bearing—probably about 1926—'27. The idea is to create an object lesson to induce more planting of improved pecan orchards.

Just mention AMERICAN NUT JOURNAL.

PRACTICAL CULTURAL WORK

The substitution of the improved nut for the native nut is the chief work in the development of the Nut Industry, as the American Nut Journal has repeatedly pointed out.

The problem includes nuts of all kinds, North, South, East and West. It is highly encouraging to note the great progress made in each of these sections of the country. Commercial nut culture of the improved varieties is now in progress in each of the sections. In all of them plans are in operation for greatly extending activities, as shown by the news reports from month to month in this journal.

In Texas the problem has become of special importance because of the very large crops of native pecans. Pecan experts of that state have at every opportunity emphasized the necessity for substituting for the native the improved varieties of pecans. The subject has been uppermost at meetings of the Texas Pecan Growers Association, many of the members of which have had to be educated to the need for special effort toward commercial production of improved varieties rather than the centering of all effort on the marketing of what Nature has provided without the aid of man.

Every encouragement should be given the earnest work of leaders in that state who are striving to develop pecan orchards of improved varieties. An instance (one of many) of the practical work that is being done in this direction is the holding of Pecan Demonstration Day and the formation of a pecan club, as reported in this issue of the Journal. Here is an idea that can be adopted everywhere, to the great advantage of nut growing. The Journal has recorded repeatedly instances of instruction of adults in pecan budding, grafting and top-working in Texas and elsewhere, and in some cases the instruction of boys and girls in this work. The Pecan Demonstration Day at San Saba, Tex., is an outstanding example of what can be done to interest boys and girls in the subject. Getting the school children interested in this manner is a long step toward the desired goal.

A. W. Woodruff, a prime mover in the Texas Pecan Demonstration Day plans said last month:

"Everyone who was there voted the occasion a success, and Prof. A. P. Swallow, Col. P. L. Downs and J. H. Burkett said they considered this one of the most important pieces of extension work that had ever been put across in connection with pecan growing—that is, to get the idea of improved pecan propagation started in the minds of our boys and girls. Naturally the members of the committee feel gratified that such men approve what was done.

"The matter will not be allowed to rest. We are going to keep the idea stirred up in the minds of the pupils who attended the demonstration and get new members as rapidly as possible. Our pecan club is organized under the extension work service of A. & M. College and we will therefore get the co-operation of the institution, which will be very important to the work the club members will do.

"Next fall, as soon as the season will permit, we expect to hold our Second Annual Pecan Day, and make a tree planting day of it. Our first annual day was held in August, 1922, as printed in the American Nut Journal, and by the time the next one comes along we expect to have a pecan club membership of 500 to 1,000 boys and girls;

and whisper: also some of these adults who have been asleep for lo these many years in regard to pecan possibilities in this, the birthplace of pecans."

FEDERAL LOANS ON PRODUCTS

An interesting discussion of the application of Federal Loans to agricultural products was a feature of the annual convention of the Texas Pecan Growers Association in Brownwood, Tex., last month. This was based on an address to the members by President M. H. Gossett, of the Federal Land Bank of Houston, Tex. Mr. Gossett said:

Before addressing myself to the subject assigned me of "The Relation of the Federal Land Bank to the Texas Pecan Grower," I beg to congratulate the membership of this Association upon the progress which has been made in the way of educating the public upon the value of pecans as a staple and valuable food. For many years the pecan was regarded like wild hickory nuts and walnuts, as a delicacy and as a desirable commodity mixed with home-made candies and cakes. But little attention was given to the subject of the pecan as a staple and rich article of diet. The pecan is now recognized as not only universally palatable and rich in protein, oil, and other valuable food qualities, but with an active market for same to the extent of educational propaganda and the ability of pecan growers to supply the demand. We have learned the value of a natural pecan orchard which has required centuries to grow in the valleys of the creeks and rivers of Texas, and, in addition thereto, the planting, grafting and budding of domestic orchards with their improved quality of fruit has made wonderful growth and expansion with the last few years. Quite as palatable as meat, the pecan supplies the same food values minus the undesirable qualities and consequence of excessive meat diet.

The Federal Land Bank of Houston has made many loans on lands on which are growing pecan orchards, both native and cultivated, and, while at this time we do not approve loan values which arise exclusively from the market value of the products of pecan orchards, our Executive Committee are always glad to note, in connection with our appraisers reports, that the security is growing pecan trees.

Speaking generally, it is unsafe for any leading institution where the loans cover a period of thirty odd years to approve standards of value which arise from the market value of products of orchards, whether citrus fruit, berries, or the usual orchard of apples, peaches and nuts, for the reason that most orchards are subject to blight, drought, frost and insects; and frequently have to be replanted during the life of a long loan. The story, however, of the record made by the Federal Land Bank of Houston and the promise of service of the Federal Intermediate Credit Bank of Houston possesses the same interesting qualities to the membership of your association that they possess to all other classes of agriculturists and horticulturists.

Mr. Gossett outlined the origin and functions of the Federal Land Banks. The discussion included a consideration of whether, and under what conditions, pecans in bulk, stored in standard warehouses, would constitute a non-perishable agricultural product to the extent of being entitled to the service of loans by the Federal Intermediate Credit Bank on the security of warehouse receipts. Speaking generally, the opinion was advanced by those familiar with the trade, that pecans in proper condition when stored and kept in warehouses at a proper temperature during the spring and early summer months would furnish a reasonably safe security for loans pending the orderly marketing of such products.

The discussion of the subject is of interest to all branches of horticulture as well as to the pecan industry.

WHAT TEXAS NEEDS

Texas is not yet ready for co-operative marketing in the sense that the term is generally used.

As A. W. Woodruff, San Saba, has clearly pointed out (and as others have shown), the logical way to put Texas in its right relation to other pecan producing states is to build up a production of pecans of the improved varieties. It is these varieties that will stand the test in the markets and compete with the product from other states. Every effort should be bent toward rapid extension of orchard area of the improved kinds. There are immense possibilities in Texas where the growth of the native trees has shown adaptability of soil and climate.

President W. P. Bullard, of the National Pecan Exchange, who attended the annual convention of the Texas Pecan Growers Association in Brownwood last month said to Mr. Woodruff: "You are absolutely right about it; your state is not ready to take up the co-operative marketing question." Mr. Woodruff has never opposed the co-operative plan for the marketing of improved varieties of pecans. He has strenuously opposed the application of that plan to the selling of wild pecans, because it would set back the state's real pecan industry—the development of commercial orchards of the improved varieties—twenty years. Centering attention on the native crop will keep landowners from improving their trees and planting orchards of high grade pecans. Texas should plan to cut a big figure in the market for improved varieties of pecans.

The great need of Texas is to get the land-owners awakened to the fact that their real prosperity depends on their improving pecan timber they own, and putting out orchards of improved varieties. The reason they have not done so is that there has been a superabundance of the native pecans, and the people have come to look upon them as a "pick-up" which didn't cost them anything, but was just like finding money on the street; so they cannot realize the importance of advanced cultural methods. They will come to it in time, and all the sooner if some of the non-thinking enthusiasts, and others who do not want to spend any money improving their timber, will defer the co-operative plan until the state has a cultivated product to co-operate with.

PLANT BLACK WALNUT

Nut experts unite in recommending the planting of black walnut which grows naturally in most of the states. It is a hardy tree valuable both for nuts and lumber and there are fine named varieties now or soon to be available in Nursery stock. The U. S. Department of Agriculture urges the planting of black walnut as do the leaders in the Northern Nut Growers Association. Black walnut orchards are being planted in the Northern states and many are planning to join in the movement as soon as more propagated trees for planting are available.

Texas pecan trees this month are passing through the critical season. They were never more heavily loaded in the San Saba and other sections. The case-bearer is due this month. Up to June 5th the insect had not been in evidence and it is thought that if the crop gets past July 1st without damage it will be reasonably safe.

A Dallas, Tex., resident protests against the regulation of that city that a property owner cannot plant a pecan tree in front of his lot.

President A. C. Snedeker

A. Clarke Snedeker, of Blackshear, Pierce County, Georgia, the newly elected president of the Georgia-Florida Pecan Growers' Association, is a native of West Virginia, having been born on a farm near the famous village of Bethany in the year 1855. He received his education at Bethany college. He spent some years in teaching and education work in the far West, moving to the city of Philadelphia, where for 20 years he was engaged in the publishing business.

Some fifteen years ago, on account of failing health, he went to Southeast Georgia, located near Waycross, in Pierce county, and became active in building up the pecan industry, and is now recognized as one of the pioneers of the industry in that favored section of the pecan belt.

Mr. Snedeker's pecan groves and Nurseries near the city are very attractive as well as profitable, showing skill and ability of a high order in the industry. He has always been active in publicity work and prominent in the various pecan associations, so that his promotion to the presidency of this organization is a natural tribute to his ability and popularity.

Blackshear has been made one of the leading tobacco markets of the South. Cotton, Satsuma oranges, pineapple pears are grown in large quantities. To pecans, however, the farmers are turning for a permanent investment. There are groves many years old, rows of trees around which two men could hardly stretch their arms, trees planted by former generations and bearing small but quality nuts. Those pioneers pointed the promise of today's increasing development of the industry.

W. T. Duvall and his mother have many acres in trees on the farm next to Mr. Snedeker. The old trees found on the place when the Duvalls came to Georgia from Kentucky fifteen years ago, have never borne less than 2,000 to 3,000 pounds of nuts; the new groves of budded trees have yielded several hundred pounds each.

Among other large grove owners in the county are A. J. Strickland, Dr. W. P. Williams, A. L. Scott, J. E. T. Bowden, T. J. Darling. The Scott Nurseries not only supply pecan trees but Satsuma orange trees, pineapple pears, and a great variety of flowers and shrubs. From Ohio, Illinois, Nebraska, Pennsylvania, Kentucky and North Georgia the settlers have come to Pierce to grow pecans.

If it relates to nut culture it should be in the AMERICAN NUT JOURNAL. Please send it in.

This Is the Life

The Filipino, in his nipa shack nestling in the shade of a coconut grove on the shore of the sea, is the most independent individual in the world. When hungry he can eat coconuts. When thirsty he has at his disposal plenty of tuba, a coconut juice drink. His house is thatched with coconut leaves. His fish and rice are cooked over coconut husk fires and served in coconut shell dishes. His carabao is fed on copra meal, a byproduct of the coconut. His wife uses cocount oil on her hair and she bathes the baby with a coconut shell dipper. When the banca, the native boat, leaks it is caulked with coconut shell scrapings. When the Filipino is in need of some money for clothes a few coconuts are sold. This is the life.

Coconut trees start bearing when about five years old, but good crops are not obtained for three years more. Coconut raising is an easy life after the trees are once set out. Virtually all there is to do is to wait for the coconuts to fall from the trees. —Lt. Col. H. Edmund Bullis in the Brooklyn Eagle.

Italy's Almonds and Filberts

Italy's 1922 almond crop has proven to be an excellent one and will probably reach about 15,000,000 kilos, says Consul E. L. Natuan, Palermo, in a report to the Department of Commerce. Filberts are a disappointment, owing to heavy frosts and winds during the flowering season, and will not exceed 6,000,000 kilos.

Two million kilos of last year's filberts are still on hand, and not more than 500,000 kilos of almonds; 33,600 kilos of pistachios are expected. Prices of almonds will remain high for some time, due to the heavy commitments of some of the largest exporters in Sicily who speculated on old stocks. Owing to the small carry-over, these commitments will have to be met from the new crop.

Utilizing Chestnut Trees

Inspections on posts made of blight-killed chestnut trees in one locality during eight years of service showed that decay progresses about as rapidly in undiseased posts as in blight-infected posts. The blight fungus attacks living trees and grows in the bark, particularly in the cambium layer, but it does not penetrate deeply in the wood itself. The blight finally kills the tree, effectively girdling it by separating the bark from the wood. Blight-killed chestnut should be cut and utilized as soon as possible.

Just mention AMERICAN NUT JOURNAL.

ALL INTERESTS CO-OPERATING

ATTENTION to the mutual interests in the Nut Industry is succinctly directed by Manager T. C. Tucker of the California Almond Growers Exchange: "We are a strictly co-operative organization, including Grower, Broker, Wholesaler and Retailer."

This may be said also of organized effort in the production and distribution of Walnuts and Pecans, each of which is represented in Associations.

It is because of this co-operative feature that the American Nut Journal combines the news of the Nut Industry in the fields of Production and Distribution. Its Market and Crop Reports will be of increasing value.

It is of prime importance that the market shall be supplied; a supply is the basis upon which a market exists.

It is also of prime importance that a market be created and maintained; distribution of the product is what makes the industry.

The Journal desires to co-operate heartily with producer and distributor, and to that end welcomes frequent communications by way of comment on current events, personal mention, trade news and suggestions. It is the logical medium for interchange of trade comment and the recording of trade activities.

DISPOSING OF PECAN CROPS TO BEST ADVANTAGE

Address by A. W. Woodruff, San Saba, Texas, at Annual Convention of the Texas Pecan Growers' Association—Produce First the Kind of Pecans Worth Advertising—Strong Plea for Commercial Orchards of the Improved Varieties, Rather Than Centering Effort on Native Pecans—"The Pecan on the Table and in the Diet" the Keynote—Educating the Public.

In my brief remarks about advertising pecans, I shall have to confine myself to the only kind in which I am particularly interested, and that kind is pecans of known varieties upon which men and women are willing to spend time and money to produce; the kind they are not ashamed of or afraid to offer for sale under their own names and brands; the kind for which they, with truth, may claim merit, and regarding which they are not afraid or ashamed to say to their customers: "I am back of these pecans and guarantee them to be all I claim for them. If you do not find them as represented, then I stand ready to make good."

And that is the only kind of pecans, ladies and gentlemen, that are ever going to get anywhere in a business way, the kind of pecans for which you do not need to offer an apology or an explanation for low quality.

Right here let us see what Mr. J. M. Patterson, first vice-president of the National Pecan Growers' Association, said about quality in his address before that same convention of pecan growers last October. He said:

"The papershell pecan is marketed as the quality nut. The size is a very attractive feature, but bigness without quality only intensifies the disappointment and assures the loss of further consumption. It is therefore obvious that it is of utmost importance that pecan growers exercise ever increasing vigilance to grow better nuts and raise the standard of grades. The logic of this line of argument is that such portion of the crop each year as contains any considerable per cent of low grade nuts should be kept off the market. The man or association that will sell pecans with any considerable per cent of bad quality nuts, no matter at what price, will be classed with the men who sell goods supposed to be all wool but containing a per cent of cotton. He may get away with it once, but he will soon find himself without an outlet."

Now then, assuming that we are going to produce the kind of pecans worth advertising, how are we going about it to bring the excellent qualities of our goods to the attention of the buying public?

First, by advertising our goods to ourselves. Here in Texas, particularly, we have got to get acquainted with our pecans—our real pecans—to which at present we are largely strangers. We have got to realize that we must produce a commodity which we do not have to try to sell through implication that it is good, but which we will sell upon a guaranteed statement of what the customer is getting for his money. When we get to that point, we will have taken a long step forward in establishing a real pecan industry in Texas.

Second, we have got to advertise to our prospective customers just what they are getting and why; what percentage of real value they are getting and what percentage of waste. And that brings us to the question: What constitutes real value from the viewpoint of the consumer? There can be but one answer—the meat content.

You may have the proverbial 57 varieties of official grading standards, but the one thing that is going to fix future values on pecans will be: How much meat is there inside the shell?

Some of the pecans in our 1922 exhibit for San Saba county were as big and fine

looking as any pecans upon which you ever gazed. We did not grade that exhibit; it represented the individual entries of different men and women who brought what they considered their best. And people have paid seventy-five cents and a dollar a pound for such pecans as those to which I am referring, not only from San Saba county, but also from other counties in Texas where pecans are produced. But what was the customer getting when he bought that kind of pecans? Anywhere from 33 to 42% meat content. In other words he was paying for 58 to 67% of wastage in the form of shell and fibre that is utterly worthless. When you advertise that kind of pecans as



A. W. WOODRUFF, San Saba, Tex.

first class pecans, you are letting down the bars and inviting the accusation that you are trying to obtain money under false pretenses.

We have got to prevent such a condition by producing and advertising only pecans that will run fifty per cent or better in meat content. We have got to be able to go to our customers, through our publicity claims, and guarantee that they will get at least a fifty-fifty break for their money; and until we can truthfully advertise that kind of pecans we are not going to get very far with a commercial pecan industry.

Third—and this is of first importance—we have got to educate our public, through advertising and then delivering what we advertise, to the important fact that pecans are not a luxury. The keynote of real pecan advertising was sounded by Mrs. Lucas in her able handling of her subject, "The Pecan on the Table and in the Diet." Right there, ladies and gentlemen, is the real reason for pecan propagation; the one reason so great that by comparison all other reasons are mere trifles.

We have got to do the missionary work, through advertising and then making good our claims, that shall fix in the public mind the fact that the pecan is one of the finest and most perfectly balanced foods with which a beneficent Creator ever blessed mankind. We have got to put a stop to the prevalent idea that the pecan is merely a Thanksgiving-Christmas-whoop-hurrah luxury, to be sold under the old

statutory warning, "Caveat emptor," or in other words, "Let the buyer beware."

Possibly this may seem like verging on the sales department, but advertising and selling are so inextricably interwoven, so much a part of each other, that you cannot do one successfully without doing the other.

Let me again quote Mr. Patterson:

"The American people are more critical of quality in their staple foods and luxuries than they are of price. And a poor quality of staple food or luxury, although it reaches the consumer at a reduced price, always leaves a bad taste if not a grouch. The result is dissatisfaction and the loss of a customer."

And here is the statement of a prominent Southern dietetic expert:

"An acre of fertile southern soil, covered with pecan trees in full bearing, will furnish food for 1200 to 1800 times as many persons as could be supported by the same area devoted to meat production."

So the public must be informed, through the right kind of publicity, that pecans are the coming great food of mankind—and the public must be told why. It must be hammered into the minds of men and women, through the right kind of publicity, that measured in calories, pecan meats have three and seven-tenths times the food value of the finest beefsteak, and about double the calory value of common cheese, these being two of the most concentrated foods known to dietitians; that in the pecan the proteins, carbohydrates and free nitrogen are so combined and blended as to be readily assimilable and digestible; that pecan meats have a very small percentage of ash and crude fibre, and that their food value, by weight, is about ninety per cent to the pound, as against 33 and 35% for the cheese and the meat. These are the great outstanding facts that will fix the food value of pecans; the facts that when once firmly instilled in the public mind will result in such a demand for pecans, guaranteed pecans that give the buyer a fair return for his money, that pecan growers will not be able to supply that demand, even though every acre of Texas soil were planted in pecan orchards.

We have got to advertise something that we can deliver. We have got to back up that advertising by delivering the goods we promise. We have got to get away forever from the false assumption that a pecan is merely a pecan, and we have got to develop the known varieties so that when we offer for sale the fruit of our pecan trees we can offer something that has a name, a brand and a guaranty behind it.

When you want an apple to eat, do you walk into a store and tell the clerk, "I want an apple; no particular kind of an apple; any old apple will do?" You do not. You ask for a Delicious, if you can get it, or a Winesap, or a Jonathan, because you know they are superior apples, and you are willing to pay extra for that kind, or for a Grimes Golden or a Golden Delicious. Those apples have been bred up, developed to a condition of superiority, and you have confidence that when you buy one of them, or a box of them, you are getting the best to be obtained—and you are getting just that.

Texas pecan men and women have got to take a page out of the book that has been

INSECT CONDITIONS IN A BEARING PECAN ORCHARD

Address by A. I. Fabis at Convention of the Texas Pecan Growers' Association—Some Comment on Two Insects of Interest, the Hickory Aphid and the Pecan Case-Bearer—Working on Control Measures.

Prospective pecan planters frequently request information with reference to possible insect depredations to young orchards. From our observations, we do not hesitate to state that if your nursery tree has not been winter killed, if it is planted in the proper kind of soil, and is well cared for, it will ordinarily not be attacked by any very serious pecan pests. Fall webworms, grasshoppers and walnut caterpillars may destroy some of the foliage, but these are readily controlled. You may find some yellowish-green bud-moth larvae feeding on the terminal buds or curling the edge of a leaflet here and there, but they are ordinarily not so abundant as to justify spraying, though a lead arsenate application will check them.

Occasionally the flat-headed apple tree borer, a yellowish-white "sawyer," will be found tunneling under the bark and tightly stuffing its burrows with grass. Young trees should be examined during the summer and fall and the young borers removed with the aid of a pocket knife, before they inflict much damage. With a little experience, you will have no difficulty in locating the pest by the oozing sap and discoloration of the bark. These borers confine their attacks to diseased, injured,

written, but never published, by the growers of other kinds of fruits and other kinds of nuts. We must come to a full realization that we must produce only the very best in order to build up a stable industry. Only in that way can we make it worth while to advertise our product, because, my friends, it costs a heap of money to advertise anything, even when done in the most scientific way and according to approved methods.

We have got to go to the wide world with this message: "Pecans are the finest food on earth." That is the "Message to Garcia" that we must send out to our customers who will buy our pecans. We have got to make them believe that when they buy our pecans they are not indulging in a holiday luxury, but in a real food, the finest food that they can buy; a food that is as good for people to eat on the hottest day of the year as it is at Thanksgiving, Christmas and New Years.

If you expect me to tell you at this time the best kind of advertising copy to use in advertising our wonderful product, and the best method of presenting that copy to public attention, you will be disappointed. I can not tell you, and neither, I believe, can any other person on earth. The real literature of the pecan is yet to be written, although a start is being made. Other and more competent persons than I will write the advertising literature of this food without a peer, and those will be successful in pecan propagation who will have the faith, the goods and the guaranty to make good the claims of those writers.

Today sees dawning on the commercial horizon the great coming industry of Texas. That must be apparent to anyone who has the slightest imagination to forecast what is becoming plainer day by day. The pecan era is almost at hand, but its history, its epic and its Iliad will be written in the advertising copy of men and women who in its behalf have not, at this time, perhaps, even touched pencil to paper.

dying and dead timber, and but seldom attack vigorous growing trees.

The insect conditions in a bearing pecan orchard are somewhat more complex and varied; some pests have but a limited distribution in the pecan belt, while others are affected in their abundance by the cultivation and care of the orchard, the inter-crops grown and the native timber about the orchard.

To select two insects of interest to approximately all pecan growers, permit me to briefly discuss the little hickory aphid and the pecan nut case-bearer. Our aphid is a minute yellowish plant louse, generally found on the under surface of the foliage, sucking the leaves and secreting the honeydew, by which it is generally recognized. This pest hibernates in the egg stage, hatches when the buds swell and reproduces rapidly during the growing season by giving birth to living young. Its injury is difficult to estimate and it has not heretofore been considered of primary importance. But from my field observations with reference to occurrence of pecan scab, especially in this semi-arid section where fungous diseases are not very abundant, I infer that the little hickory aphid aids in spreading this serious disease by contact or direct inoculation. Growers who practice spraying against scab or leaf feeding caterpillars, should include some contact insecticide as 1½ pints Blackleaf—40 per 200 gallons of spraying mixture, when this pest is abundant.

The pecan nut case-bearer is the most important factor affecting the annual pecan production of the United States. The observant grower needs no introduction to the dark greenish worms which feed within the little pecans during the month of June and again in August. We have made a careful study of the life-history and habits of this pest and have attempted various sprays to control it during its vulnerable periods. We have secured some control by several applications and timely spraying, but we are engaged in further investigations in an attempt to secure more definite and practical results.

To those of you who own young, bearing and budded pecan trees, permit me to suggest a method of hand-picking the pests, to reduce the infestation. About the first of May our case-bearer will be found in a hollowed pecan shoot, in the larval or pupal stage. They are readily observed from a distance by the wilted shoot. In its entire life cycle this pest is least abundant at this time of the year, for it has lived through a period of seven or eight months and been decimated by extremes in temperature, parasites, predaceous insects and birds. The infested shoots should be collected and destroyed. When the next generation hatches, towards the first of June, the young larvae in the infested nuts may be abundant enough to justify a second picking, but the benefits derived cannot be as pronounced as the May first collection of the over-wintering larvae and pupae, in the pecan shoots.

If it relates to nut culture it should be in the AMERICAN NUT JOURNAL. Please send it in.

Pecan Breeding

The Dallas, Texas News, in its issue of February 28th, said editorially:

"All of our improved pecan varieties have so far simply been discovered in their wild state and propagated by buds and grafts," and "The breeding and fixing of a new variety (of pecans) would take from 25 to 30 years, according to J. A. Evans, pecan grower of Arlington."

J. A. Burkett, pecan specialist of the Texas Department of Agriculture takes exception to the above, saying:

"E. E. Risien, of San Saba, is credited with having produced several improved pecan varieties. Mr. Risien demonstrated that the variety is 'fixed' for all time to come just simply by taking buds and transferring to other stocks. He was enabled to get fruits from his new variety in a very few years. If by 'fixing a variety' is meant that it will require that length of time to secure a new and distinct variety that would reproduce the variety from seed, then it is possible that one hundred years would be too short a time."

To which the News replies:

The second interpretation of the term "fixed" used by Mr. Burkett (and which was the one intended by The News) clearly shows that Mr. Risien could not have bred and fixed even one pecan variety in his lifetime unless he were aware of some vastly quicker method not known to Mr. Burkett. The News has no means of knowing whether Mr. Risien at some time in his life not less than 25 years ago did know of and at once put into practice a method by which new pecan varieties could be bred and fixed in a quarter century, and it has no desire to deprive him of due credit if he did achieve such a result. But The News wishes to make the point that a method is now known—if pecan authorities may be trusted—by which new varieties can be bred and fixed in 25 to 30 years.

This method consists of cross-pollenizing the parent plants selected, planting the seed resulting from the cross, transferring the buds from these seedlings to older trees to hasten bearing, planting the resultant nuts again transferring the nuts to older trees, and so on for six generations. Granting no serious disasters, The News sees no reason why a variety so bred could not be rather definitely fixed in six generations, or about 25 years.

15,000 Pecan Buds Set

In an interview recently relative to the interest taken by the pecan growers of Texas J. H. Burkett, nut specialist, of the State Department of Agriculture, says that he recently met more than 400 Gillespie County farmers, who were effectually organized to set at least 15,000 pecan buds within a period of two or three days.

An unusual feature of this pecan development work in Gillespie County, Mr. Burkett says, is that the County Judge of that county, Judge Usener, heartily co-operated with County Agent R. S. Miller, in the work, both becoming enthusiastic and active leaders in the movement. They raised the funds with which to purchase the material for budding and grafting. They secured the beeswax, rosin, wood alcohol and twine and prepared the wax, ready for use, in the office of the County Judge.

O. K. Darden, Lone Grove, Okla., pioneer pecan grower, recently started top-working 4,000 native pecan trees at Comanche, Okla.

SOME VALUABLE PECAN STATISTICS

In his address at the annual convention of the Texas Pecan Growers' Association, R. E. Yantis, statistician of the Texas Department of Agriculture, said:

Upon request from the Bureau of Agricultural Economics, the statistical scientist, Perry Elliott, furnished me the following table. It was furnished me in the form of a photostat copy of the census report on agriculture which shows the number of trees of bearing age, and non-bearing age, production and value of pecans by states for the years 1899, 1909 and 1919. Omitting the states where pecan production is negligible, the report is as follow:

(1) How many grafted and budded trees did you dispose of in the year 1922?

(2) How many were bought from Nurseries out of the state?

(3) How many were shipped out of the state?

I received answers from nine Nurseries. The sum of the answers to question one was 32,582; to question two, 10,790; to question three, 7,561.

Th above figures appear to me not to be as large as they should.

I sent questions to the Commissioners of Agriculture of the states wherein pecans are grown commercially, requesting information as to the number of trees in their

1921, 238,000 pounds; 70 per cent of a full crop. In 1922, 20,000 pounds, 6 per cent of a full crop. Prices, 1921, 15c for native pecans, and 30c to 70c for budded. In 1922, 18c for native and 45c for budded. Number of Nurseries, one.

From Georgia: Improved varieties, 78 per cent of the crop. Number of trees, improved varieties, 857,419. Native and wild, 241,837. Number of pounds in 1920, 1,993,472; in 1921, 2,666,303 pounds, and in 1922, 812,294 pounds. Value in 1920, \$29,000; in 1921, \$1,125,000; in 1922, \$365,532. Prices in 1921, 46.6c; in 1921, 42.1c, and 1922, 55c.

From Florida: Number of trees in state, 1920, 266,966. Number of bearing trees, 650,164; non-bearing trees, 201,802. Number trees 1922, 507,847. Bearing, trees 195,582; non-bearing trees, 312,265.

From Louisiana: Pecan trees not of bearing age in the state of Louisiana were reported by the Census Bureau in 1910 as numbering 119,457, and in 1920, 101,285. In 1910 the number of farms reporting pecan trees not of bearing age was 4,483, and in 1920, 8,305. The per cent of farms reporting pecan trees not of bearing age to the Census Bureau in 1910 was 3.7 per cent and in 1920, 6.1 per cent. The number of pecan trees of bearing age was reported by the Census Bureau in 1910 at 36,527, and in 1920 at 94,513. The number of farms reporting pecan trees to the Census Bureau in 1910 was 4,225, and in 1920, 9,095. The per cent of all farms reporting pecan trees of bearing age in 1910 was 3.5, and in 1920, 6.7 per cent. The production of pecans is reported by the Census Bureau in 1909 at 723,578 pounds and in 1919 at 2,242,859 pounds. The value of the pecan crop in 1909 was stated to have been \$70,635, and in 1919, \$672,862. Budded, grafted, and top-worked trees make up approximately 15 per cent of the total number of bearing trees. Seedlings and wild nuts growing in the woods and fields make up approximately 85 per cent of the total number of bearing trees. I have no good data as to number of pounds produced in 1920-21-22. Likewise, I have no good data for the value of the crop in 1920-21-22.

The price per pound received by growers in 1920 for seedlings and wild nuts was 23c, and for improved nuts, 47c. In 1921 the price per pound for seedling and wild nuts was 15c, and for improved, 38c per pound. In 1922 the price received by growers for seedling and wild nuts was 18c, and for improved nuts, 40c per pound.

As to the number of Pecan Nurseries in the state and the number of trees grown in 1920-21-22, I would refer you to Mr. G. D. Tiebout, Specialist in Horticulture, Baton Rouge, Louisiana, and Mr. M. Hull, Assistant in Horticulture, Baton Rouge, Louisiana. Either of these gentlemen, I am sure, will give you the information you desire as to the number of Pecan Nurseries. However, I am not so sure that they have knowledge of the number of trees grown in the Nurseries.

As to the number of pecan trees shipped to Texas by Nurserymen, I am unable to furnish you any data.

Referring again to the number of pounds produced in 1920-21-22, the per cent of the full crop in 1920 in Louisiana was estimated at 15%; 75% in 1921, and 11% in 1922. Considering a normal or full crop in Louisiana to be 2,492,000 pounds, the production in 1920 should be 373,800 pounds; in 1921, 1,869,000 pounds, and in 1922, 274,120 pounds; these last figures are tentative estimates.

Considering the volume of the varieties

NUMBER OF FARMS REPORTING TREES OF BEARING AGE.

	Farms 1920	Farms 1910	Trees 1920	Trees 1910
Missouri	1,000	1,060	35,434	48,823
Kansas	708	476	20,193	27,718
Virginia	652	200	12,452	868
North Carolina	3,704	1,117	17,470	6,876
South Carolina	5,604	1,586	58,025	33,326
Georgia	18,852	3,900	444,722	75,509
Florida	7,167	2,648	113,517	42,512
Kentucky	488	197	7,501	2,320
Tennessee	826	389	4,127	2,037
Alabama	11,218	2,956	176,433	41,683
Mississippi	10,713	4,288	129,971	60,524
Arkansas	2,228	1,000	19,233	13,958
Louisiana	9,005	4,225	94,513	36,257
Oklahoma	7,170	1,205	400,480	96,768
Texas	19,204	10,519	1,045,604	1,087,619

NUMBER OF FARMS REPORTING TREES NON-BEARING AGE

	Farms 1920	Farms 1910	Trees 1920	Trees 1910
Missouri	576	298	31,891	7,214
Kansas	203	76	8,440	2,707
Virginia	888	240	3,807	2,337
North Carolina	6,405	2,110	37,227	20,781
South Carolina	7,039	2,888	90,025	43,639
Georgia	20,878	7,353	654,281	325,770
Florida	7,198	4,614	208,613	170,307
Kentucky	227	117	2,301	2,257
Tennessee	877	305	7,002	3,309
Alabama	13,444	5,834	257,671	125,734
Mississippi	12,733	6,671	254,187	148,000
Arkansas	2,210	1,134	30,810	13,811
Louisiana	8,308	4,483	101,283	119,547
Oklahoma	1,524	480	108,650	53,703
Texas	9,500	6,171	449,464	421,550

PRODUCTION IN POUNDS

	1920	1910	Increase from 1910 to 1920	1899
Missouri	555,184	147,430	407,764	75,170
Kansas	252,802	30,583	232,219	47,530
Virginia	33,927	10,568	23,359	1,340
North Carolina	145,753	74,801	70,952	10,909
South Carolina	525,783	159,823	365,960	13,030
Georgia	2,544,377	354,046	2,190,331	27,440
Florida	1,025,673	307,632	718,041	4,680
Kentucky	50,352	25,577	24,775	63,300
Tennessee	70,504	25,581	44,923	7,810
Alabama	1,170,735	228,341	942,394	60,670
Mississippi	1,559,245	637,203	922,042	212,300
Arkansas	318,382	219,935	98,447	80,050
Louisiana	2,212,830	723,578	1,519,252	637,812
Oklahoma	4,205,642	801,172	3,404,470	16,580
Texas	16,755,421	5,832,307	10,923,114	1,810,670

TOTAL VALUE

	1920	1910
Missouri	\$ 166,561	\$10,467
Kansas	75,841	1,402
Virginia	10,184	1,356
North Carolina	43,736	8,194
South Carolina	157,724	20,442
Georgia	800,535	47,845
Florida	307,705	43,912
Kentucky	15,110	2,887
Tennessee	17,454	2,208
Alabama	353,921	30,640
Mississippi	380,813	79,666
Arkansas	87,106	17,033
Louisiana	672,802	70,635
Oklahoma	859,331	50,481
Texas	3,680,101	57,313

REPORTS FROM TEXAS NURSERIES

I sent out written requests to the Pecan Nurseries of the state for answers to the following questions, to wit:

respective states, the amount of production, value of the crop, prices received by the growers, number pecan Nurseries, number trees grown, and number trees shipped into Texas for the years 1920, 1921 and 1922. In answer to which I received the following replies, none of which are fully responsive to all the questions, the reason assigned by respondents being that no data were attainable on the items not covered by the responses:

From Alabama: Number of trees in the state, 229,000; improved varieties, 114,500; seedlings and wild, 114,500. Number of pounds in 1921, 305,000; in 1922, 916,000 pounds.

From Arkansas: Number of trees in the state, 57,000; 17 per cent of a full crop. In

to make up 15% of the total of the nuts and the per cent of the seedlings and wild varieties of the nuts to make up 85% of the total production, the total value of the pecan crop in Louisiana is approximately as follows: 1920, \$99,431; 1921, \$344,831; 1922, \$57,564.

As to the above references given, I wrote the parties and received this response: "I am sorry that the data that you want on the production of pecans for the past three years is not available, specifically.

"I can only say that the number of wild seedling pecan trees in Louisiana far exceed the number of trees in pecan orchards. It is claimed that there are more pecan trees (wild) grown per acre in Louisiana than in any other pecan region. The greatest number of sum total pecan trees, however, are located in Texas. One parish or county (Pointcoupee) has shipped 200 carloads of native seedlings pecan nuts, 1921. The seedling crop is great enough to influence the market price of pecans of named varieties. There are not over 100,000 pounds of variety pecans produced in the state when the crop is at its best.

I regret very much that we have no definite figures on pecan culture. The pecan trees grow wild in this state. That is one reason why more pecan orchards are not planted. The opportunities for developing along the line are unlimited, and, I think, that the holders of large tracts of land are overlooking great possibilities by not planting pecan trees of right varieties. The right varieties—must be planted. I am glad to read that Texas is taking the lead away from other states in pecan culture. Georgia is first so far.

(Signed)

B. Szymoniak,
Horticulturist in Charge,
Hammond, Louisiana.

From Oklahoma: Advise that the pecan crop in Oklahoma has not been given very much consideration as far as the gathering of statistics on the crop is concerned. Most of their pecan crop is of the seedling and wild variety, and during the last several years the crop has been so short that no effort was made to obtain a production figure. The last statistics available are to be found in the last Census Report.

In Mr. Burkett's recently issued Bulletin, "The Pecan in Texas," it is shown that there were in 1921, budded and grafted trees, 129,955; seedlings, 714,705. In 1922, budded and grafted, 77,107, and seedlings, 640,917.

The foregoing statistics clearly indicate that the future possibilities of supply are very great. Taking into consideration the great interest now plainly manifest in Texas there is going to be a great increase in the efforts of the people to propagate pecans, and it is plainly evident that the demand will be sufficient to justify every effort that can be put forth to this end.

FUTURE POSSIBILITIES OF DEMAND

About the only way to estimate the demand for a product is to consider the number of people that may be induced to use it, whether it is a necessity or a luxury; whether it will supplant some other article or product by reason of its cheapness, utility or superiority over the article supplanted; whether it can be sold at a price that will encourage consumption, consumption being the principal cause of demand.

Comparatively speaking, it is only of recent years that the importance of the pecan as an article of commerce has been recognized. The rate at which the importance of the commercial value of the pecan has

PARAFFIN FOR TREE GRAFTING WORK

E. A. Riehl followed by J. F. Jones made advance steps in tree grafting by means of the method of covering the entire graft as well as the wound in the stock completely with melted grafting wax. Ordinary grafters did not succeed with the method as well as these two experts did.

The question then came up of making a study of the principles involved. As a result of field work Dr. Robert T. Morris came to the conclusion that translucent grafting wax like paraffin would cover all of the principles and introduce certain new features. The amber tint of Mr. Riehl's grafting wax would in a way halt the actinic ray of light which sets chlorophyll into activity, while not halting the heat ray which is more or less injurious to new cells. The black wax of Mr. Jones also seemed to require modification because of its absorption of heat ray and obstruction to entrance of the actinic light ray.

Some of the paraffins which Dr. Morris employed in experimental work were too hard and brittle. Minute cracks would form under varying influences of heat and cold and these cracks permitted enough air to enter to allow desiccation of the scions. The common parowax found in every grocery happened to be the form of paraffin which he finally decided upon as the one that was best for grafting work. Under the weather conditions at his country estate at Stamford, Conn., this answered perfectly, not only for nut tree grafting but for grafting of other fruit trees and ornamental trees. The results were published in the chapter on grafting in Dr. Morris' book entitled "Nut Growing."

As a result of this presentation of the idea the method was adopted by horticulturists in various parts of the world. Soon reports began to come in from southern regions of America and in Europe to the effect that parowax under the influence of

grown, is unmistakably significant of the still greater consumption of this product. One very large use of the pecan is by confectioners in the various articles in which they use it. It is said that one New York dealer prepared and marketed 100,000 pounds in a year. This would indicate there is hardly any limit to the amount that may be used in this way.

In conclusion, I want to predict that there is no danger whatever of the supply ever exceeding a demand that will justify a fair profit to the producers, especially if, by a system of co-operative marketing, the product is disposed of, instead of as heretofore without co-operative effort, each individual grower being subject to the dictation of the buyer.

It is indispensable that a business system of marketing the crop must be employed, one in which the producers, or growers, shall say what the price shall be and not the middle-man or speculator.

As I understand it, the chief object of your Association is to handle the marketing of the crop so as to insure the producer a fair and just price for his crop.

The State Department of Agriculture, under the direction of its able and patriotic commissioner, Honorable George B. Terrell, through the efforts of the division of his department entrusted with that work, at the head of which is that competent, efficient and pecan enthusiast, Mr. J. H. Burkett, stands ready to give every assistance possible to the pecan growers of Texas.

hot sun would remelt after application and interfere with the success of the work. In Southern California this was obviated by placing a little roll of paper around the scion and snapping a small stationer's rubber band over it. Such a procedure, however, introduced one more step of trouble which had a tendency to complicate the simplicity of the method. The question then came up of raising the melting point of parowax in such a way as to prevent remelting under hot sun.

The question was placed in the hands of Dr. W. R. Orndorff, professor of chemistry, Cornell University, and of President W. C. Teagle, of the Standard Oil Company.

The following correspondence is self-explanatory:

EXPERIENCE IN THE SOUTH

Thomasville, Ga., April 15, 1923.

Dr. Robert T. Morris, New York City,

We purchased one of the Morris Paraffin Melters recently and are conducting some rather extensive experiments with your new grafting methods here in South Georgia on pecan, pear, and persimmon. Our grafting in February and March looks very promising and many of the grafts have already started to grow.

We used the ordinary paraffin usually found in stores, but fear this will be too soft for bark-grafting in April and May, when the weather will be much warmer. Temperatures in the sunshine here sometimes reach 125 to 130 degrees F. in late spring and early summer.

Careful laboratory tests show that the melting point of the paraffin we have been using is about 118F. In order to raise the melting point to the desired amount, we have added stearic acid (powdered) in different proportions, ranging from 10 to 50% but without satisfactory results. Even the 50-50 proportion failed to raise the melting point more than 1 degree C.

So I am writing you for further advice about how to raise the melting point, so we may avoid the disappointing experience of Mr. Garbutt of California, whose paraffin melted in the hot sunshine.

Is there any other material besides stearic acid that can be used to harden the paraffin? How about trying beeswax, or rosin or both? We have endeavored to purchase a grade of paraffin with higher melting point but have been unable to do so thus far.

Any further information or advice you may be able to give on this important subject will be most highly appreciated.

O. M. HADLEY.

FROM DR. ORNDORFF

Ithaca, N. Y., May 5, 1923.

Dr. Robert T. Morris,

114 E. 54th St., N. Y. City.

Dr. Bancroft has asked me to answer your letter of April 9.

The only substance I know which will raise the melting point of paraffin is rosin. You can get rosin which is nearly colorless and this, I think, will answer your purpose better than the colored kind. The melting point of the mixture will depend on the proportions of rosin and paraffin. The more rosin the higher the melting point of the

(Continued on page 83)

If it relates to nut culture it should be in the AMERICAN NUT JOURNAL. Please send it in.

The American Nut Trade: Market and Crop Reports

PERSIAN WALNUT

The California Walnut Growers' Association announced last month that there were in hands of its brokers over the entire country less than 500 bags of walnuts of all grades of the 1922 California crop, and that before the 1923 crop was available there would be a complete clean-up. Its announcement reads:

Our Spring growing season opened up ten days or two weeks earlier than usual; so, if normal growing conditions prevail, the harvest should be at least ten days earlier than it was last season. The trees in every district, without exception, set an unusually heavy crop of nuts, and, although weather conditions have been fine during the spring months, for some unaccountable reason there has been a heavy dropping of the crop. In some sections three-fourths of the nuts that originally set have fallen off, and the average drop for the entire state is at least 40%. An early dropping of this sort is something entirely new in the walnut industry, as the trees generally carry all of the walnuts set, at least until well into June. There is still, however, a sufficiently heavy setting left on the trees to produce a crop about 20% larger than last season, if no further drop occurs, and we have hopes that the loss from dropping is past. Of course, present crop prospects may be further reduced from other causes such as an unusually heavy loss from blight or from a spell of extremely hot weather.

The 1922 crop of California walnuts amounted to 25,010.7 tons, of which the California Walnut Growers' Association handled 20,055.9 tons, and all other packers 4,954.8 tons. These are final figures which have been checked and rechecked and are guaranteed by us to be accurate to within a fraction of one per cent. Therefore, should the 1923 crop prove to be 20% larger, the California output would be about 30,000 tons, or 600,000 bags, of which the Association should handle approximately 25,000 tons.

The California Walnut Growers Association was never in better financial condition than it is today. It does not owe to any bank, firm, corporation or individual a single dollar; it has no notes or bonds outstanding; no capital stock; it has either common or preferred; it has a satisfactory bank balance; has always discounted its bills and has today a larger operating reserve than ever before. It is amply able to finance the movement of its crop and of its packing operations; and further, has always been able to satisfy its growers in the method of crop payment, the usual practice being to pay growers 90% of the f. o. b. value of their walnuts immediately each lot is packed, inspected and made ready for shipment. The small balance due growers is usually paid to them within ten days after each shipping pool is closed.

FOR SALE A FINE PECAN FARM

Five hundred acres at Albany, Ga., 350 of which were planted in best paper-shell pecan trees ten years ago. The other 150 acres a running farm with full equipment for care of trees, etc.

Can be bought on contract, with a reasonable payment down. Reason for selling is that owner needs the money in other business.

Address B. C., care of
American Nut Journal

Walnut Irrigating Test

W. B. Hooper, walnut, extension specialist of the University of California, with D. T. Batchelder, county farm advisor, have taken over five acres of the Dr. E. O. Campbell walnut ranch at Goleta, Cal., to irrigate it over a period of several years, according to what is considered standard practice.

The other five acres will be irrigated by Dr. Campbell as he sees fit. As Dr. Campbell has made a thorough study of irrigation practices it is anticipated that the figures when obtainable will throw some interesting light on irrigation of walnuts.

On each plot the amount of water, time of applying it and condition of the soil before each application, will be kept. At the time of picking the yield of each tree will be weighed and the total of each plot kept for reference.

The figures obtained on Dr. Campbell's ranch after a period of years will be used throughout the state by Mr. Hooper, who is the leading authority on walnuts in the university service.

Vacuum Fumigation of Walnuts

As a result of experiments recently carried out with vacuum fumigation of walnut meats the California Walnut Growers' Association has signified its intention to vacuum fumigate its entire crop, which will be in the neighborhood of five hundred thousand pounds. The fumigated meats will then be placed in cold storage and shipped to the trade in insect-proof containers.

BLACK WALNUT

Among those who are interested in the Lewis black walnut as described in the Journal is F. G. Cotton, of New Orleans, La., who has a tract of 100 acres near Newport, Tenn., available for a walnut grove. He also is interested in a pecan orchard at Buena Vista, Georgia, which will have 2400 trees and perhaps 4800 trees.

Cutting Walnut in Missouri

William Janes has bought 120 walnut trees from Phil Jackson and G. M. Mason at \$6 to \$25 a tree. Mr. Janes does the cutting and hauling. These trees will make three car loads and are cut underground whenever possible as the stump or underground part is the most valuable part of the tree, being used for veneer.

PISTACHIO NUT

A quantity of pistachio trees was received this spring from China for distribution to residents of Tracy, California. The pistachio is very hardy, doing well without water after starting, similarly to the date palm. It is a beautiful ornamental tree, having feathery foliage with brilliant red tufts at the ends of the branches. The nuts are rare and of fine quality, being used by confectioners for its delicate flavor. Those who took them will receive free grafts in two years with which to bud them.

At a special meeting of the Rochester, N. Y. branch of the Northern Nut Growers Association, May 16th, addresses were made by A. C. Pomeroy, Lockport, N. Y., and H. C. Flecher, Rochester, on the English walnut as grown in Western New York. It was an evening meeting at the New Osborn House, to which the public was invited.

THE PECAN

Union Springs, Ala., June 4.—Attention this week has been centered on the pecan development in Bullock county and the exceedingly profitable future for the pecan industry here, by the purchase at Peachburg, seven miles east of this city of a large tract of land by the Chunnennuggee Pecan Corporation, a company organized at Bessemer, Alabama, recently.

The lands purchased adjoin the Turnipseed orchards, which were among the first to be developed in the South, and which consist of some of the best known pecan trees. One of them, the well known "4P" pecan, developed and propagated by the late D. C. Turnipseed, twenty years ago, is considered by experts to be among the best bearing and richest nuts grown in the South.

Not many trees have been budded from this tree, but whenever they can be bought they command fancy prices. It has not been possible to supply much more than the local demand, but Bullock county is now enriched by having many hundred young trees from this fine nut.

This Turnipseed orchard also has the seedling tree about which so much was written several years ago, the tree which bore in one season 540 pounds, which at seedling prices, 25 cents per pound, brought a total of \$135.

This tree still yields big and bigger crops of nuts.

D. C. Turnipseed, with the late Dr. C. H. Franklin, was a pioneer of the South in pecan culture. The civic forces of the county, the entire banking and business circles are urging pecans and dairies. The farm demonstration service of the government here is working for pecans, dairies and poultry.

Brownwood, Texas, Pecan Laboratory

Brooke S. Ramey, Brownwood, Texas, is chairman of a committee to procure \$500 for the construction of an office and laboratory building for the Government investigations regarding pecan insects. The station has been provided through combined action by the U. S. Government and the City of Brownwood, the latter giving free use of 88 acres of pecan timber land. It is a state proposition so far as benefits are concerned. It has been agreed by the U. S. Government that at any time the A. & M. College of Texas through its Extension Department, the Texas Department of Agriculture, the Texas Pecan Growers Association of any set of pecan men want to carry on pecan experimental work at this station, they can do so. This is the first permanent step in Texas towards scientific pecan culture. The depository is the Citizens National Bank, please make your check payable to them."

An important French house will agree to grant exclusive purchase rights to an American house well situated for the sale of walnuts of all kinds in the United States.

MAURICE JACOVIA
52 Rue des Petits-Ecuries, Paris, France

Manual of WALNUT GRAFTING

The Biederman Method is fully described and illustrated. It is applicable to pecan, hickory and chestnut. Of special value in topworking, because it does away with use of ladders.

Price 75c per copy postpaid.

W. N. Y. PUBLISHING CO.,
BOX 124
Rochester, N. Y.

Paraffin for Tree Grafting

(Continued from page 81)

mixture. Too much rosin will make the mixture brittle when cold.

W. R. ORNDORFF.

HIGH MELTING POINT PAROWAX FOR TREE GRAFTING PURPOSES

New York, May 12, 1923.

Mr. Robert T. Morris,

114 East 54th Street, New York City.

Referring to your letter of April 30, we Mr. Teagle and your letter of April 30, we have had both of these letters carefully considered by our specialists at Bayway Laboratories of the Standard Oil Company (New Jersey).

It appears that the highest melting point wax which the Standard Oil Company produces at the present time is about 130-133 degrees F. By experiments they have found that the melting point of paraffin wax is raised considerably by adding thereto about 5% of Carnauba Wax. The experiments indicate that if 5 parts by weight of Carnauba Wax is added to 95 parts by weight of 133 degrees F. melting point paraffin wax and these two melted together, the melting point of the solid wax obtained after cooling is 143 degrees F. This is probably high enough for use in hot climates for tree grafting purposes.

Carnauba Wax is quoted at about 20¢ per pound. Parowax marketed by the Standard Oil Company (New Jersey) usually melts at 125 degrees F. The addition of 5% of Carnauba Wax to Parowax would produce, after melting and solidifying, a wax with a melting point of about 10 degrees F. higher, or about 135 degrees F. If a higher melting point wax is desired, a little more Carnauba Wax could be added. Commercial Carnauba Wax is dark yellow in color, and therefore, the mixture of Parowax and Carnauba Wax would be yellow.

There is no objection to the above information being published in the horticultural journals, and in case this is done the credit for the foregoing statements should be given to Dr. C. O. Johns, Director, Research Laboratory, Standard Oil Company (New Jersey) Bayway, New Jersey.

We are taking the matter up with the Manufacturing and Marketing Departments of the Standard Oil Company (New Jersey) to ascertain whether or not they wish to manufacture and market a special wax for the purpose indicated by you.

We trust that the foregoing will give you all of the information you desire, but in case it does not, we shall be glad to add to it in any way that we can.

F. A. HOWARD.

Almost anybody may now graft almost any sort of tree at almost any time of the year.

J. J. Kelsey, Clinton, Conn., is disappointed in his Buddy nut. He had accepted the statement of the woman who owned the tree that it was a good cracker, but he has found that it is not. He will propagate now from the original cordiformis.

The bulletin "The Pecan in Texas," by J. H. Burkett, chief of the division of edible nuts of the Texas Dept. of Agriculture has been sent upon request to more than three thousand persons, showing the interest in pecan culture.

J. A. Kernodle, prominent grower and recognized authority on pecans, says that Montgomery county, Ala., will in the near future be one of the centers of pecan growing in the South.

Just mention AMERICAN NUT JOURNAL.

THE NEW STATE OF BLACK WALNUT

H. R. Mosnat is receiving many inquiries as to source for procuring Lewis and Morris black walnut trees which were described in recent issues of the *American Nut Journal*. He is planning development on a large scale of these varieties and also his Glory walnut, whose wood is curly-grained. He is a firm believer in the future of nut growing generally, and at the outset particularly of black walnut of improved varieties.

As he has said in recent articles in the *Journal*, in his opinion there is enough land in the primary and secondary black walnut areas in the United States (an area larger than the corn belt) that is classed as overflow land needing drainage, to make a state as large as Illinois or Iowa—thirty-five to forty million acres. He refers to this territory as "The New State of Black Walnut."

As soon as sufficient capital is obtained active work of developing black walnut culture for this and other territory will proceed. A large number of scions will be arranged for; also 50 to 75 bushels of nuts for Nursery planting this fall.

It has needed someone to take hold of this matter of nut tree planting on a large commercial scale.

Mr. Mosnat is a very energetic, intelligent worker. Something of his experience and characteristic activity is shown in the following brief expressions:

UNITED STATES SENATE

Dear Mr. Mosnat:

With reference to the improvement of black walnut, I believe, with you, there is great room for and need of work along the lines your letter suggests.

Medill McCormick.

(U. S. Senator From Illinois.)

SINNISSIPPI FARM, OREGON, ILL.

My Dear Mr. Mosnat:

I am very much interested in what you have to say about the possibility of producing black walnuts in this section. I have not the slightest doubt but that you are on the right line. With best wishes.

Frank O. Lowden.

(Former Governor of Illinois.)

CARNEGIE INSTITUTION OF WASHINGTON

My Dear Mr. Mosnat:

I am sure the president of the Institution will be glad to consider your proposal in connection with the preparation of our budget for next year. It seems to us that such work should most advisedly be associated with the agricultural or conservation work.

Walter H. Cilbert, Adm. Sec'y.

Just mention AMERICAN NUT JOURNAL.

A NEW BOOK! NUT GROWING By Robert T. Morris

The latest and only up to date book on the newest and one of the most important branches of Horticulture, giving a broad survey of a rapidly growing industry. Detailed explanation of successful methods of propagation and the new process of grafting with the use of paraffin; illustrated.

An invaluable work for all nut growers.

Price, \$2.65, Postpaid

AMERICAN FRUITS PUB'G. COMPANY
39 State Street, Rochester, N. Y.

CITIZENS NATIONAL BANK, BELLE PLAINE, IOWA

To whom It May Concern:

I have known Mr. H. Roy Mosnat ever since he was a small boy and can vouch for his business ability and integrity and have found him honest in all his dealings and in every way dependable.

A. R. Feddersen, President.

CEDAR RAPIDS, IOWA

To whom It May Concern:

This is to state that I have known Mr. H. R. Mosnat ever since his boyhood. He is a well educated man of energy and business ability acquired by experience, and I sincerely believe that the qualifications possessed by Mr. Mosnat should make him successful in whatever line of business he may be interested.

Mr. Mosnat is known to me to be an upright man of clean character, and it is a pleasure to me to recommend him to anyone who may have business dealings with him.

W. F. Severa.

(V.P. American Tr. & Sav. Bank.)

HENRY FIELD SEED COMPANY, SHENANDOAH, IOWA

To whom It May Concern:

I have known Mr. H. R. Mosnat for a great many years and have always found him to be remarkably bright, intelligent and full of good ideas. He has been of considerable help to us several times in getting information for us in connection with our live stock and farming business. I can recommend him most heartily.

Henry Field, President.

CHICAGO, ILL.

To whom It May Concern:

For some time it has been my pleasure to work very closely with H. R. Mosnat and I wish to most heartily recommend his training and judgment. His work for me has been notably successful. He is careful, painstaking, loyal and tireless.

American Farm Bureau Federation,
Samuel R. Guard,

Director, Department of Information.

Dear Mr. Mosnat:

The subject is one that should be taken up in a serious manner.

Charles H. Wacker.

(Father of the Chicago Plan.)

Mr. Mosnat has been offered a site for a Nursery adjoining 40 acres to be set to his new varieties of black walnut as soon as enough trees are ready, with prospect of further extension of planting. There is an offer to supply 20,000 2-year-old black walnut seedlings. We understand that more than one-third of interest in the proposed new company, offered at this time, is spoken for.

A considerable quantity of one-year seedlings has been planted. Arrangements for planting 50 to 75 bushels of black walnuts for seedlings are being made. A liberal supply of scions be needed.

One Pecan Tree's Crop, \$500

The largest and most valuable pecan tree in the world, according to A. I. Fabis, pecan expert, is the tree at Bend, on the Colorado river, about fifty miles south of Brownwood. This gigantic tree is 7 feet in diameter several feet from the ground, reaches a height of 100 feet or more and has a limb-spread of vast proportions.

It took 100 gallons of spray and a hose 50 feet in length to treat the big "nut king." When there is a full pecan crop, this tree produces nuts worth more than \$500.

AMERICAN NUT JOURNAL, the Official Journal, three years for \$5.00; twelve months, \$2.00; single copy 20c.

Digitized by Google

The Round Table

Nut Trees Thrive in Utah

Editor American Nut Journal:

I experienced something of the joy of a discovery this morning, when I suddenly saw my grafted pecan trees abloom and found scores of nutlets on my English walnut trees; something of the thrill that stout Cortez felt when "with eager ken, he stared at the Pacific, silent, upon a peak in Darien." The difference in ecstasy was only in degree; but, whereas Cortez was silent, I could not repress a cry of surprise and exultation, for I have nursed and tended these trees for seven years, and longed for the time when they would reward my labors. The pecans are of the Indiana and Busserson varieties; the walnuts, Mayette and Pomeroy and were bought from Mr. Jones, in the spring of 1916. They were 2 to 3 feet trees then and are now 15 to 25 feet high, with trunks 3 to 6 inches in diameter. Surely there is no greater pleasure than the simple one of being rewarded by nature, for loving and caring for her children! Old Isaac Walton's happy complacency at the end of a perfect day's angling and his subsequent corporal gratification at the village inn were as nothing compared with the realization of my long-deferred hopes. I have new courage for further experiments and am filled with enthusiasm for future successes.

My farm is in latitude 41.44. The elevation, above sea-level 4785 feet, and our growing season averages from 145 to 180 days. The highest temperature recorded in 101 and the lowest 19. Annual precipitation is 16.39 inches, and we therefore practice irrigation. Mountains on the east, within two miles, rise to a height of 4000 feet above the farm level, but on the west, the "broad and fertile Cache Valley" as seen by Fremont in 1843, stretches in "pensive quietude" for a distance of 8 miles to the villages of Wellsville and Mendon. The atmosphere is a joyous stimulant; there is no dust, for the winds are wafted across alfalfa fields and bring the perfume of blossoming flowers.

This year our California walnuts, *Juglans hindsii*, are blooming for the first time, as are also the English beeches, *Fagus sylvatica*. *Castanea dentata*, grafted, bears annually, and European and native hazels have borne for many years. The butternut is fully acclimated here and the Mandschurian walnut, 3 years old, is taking on a vigorous growth. *Juglans rupestris* has never frozen back, but the Chinese pistacio is nipped a little every winter. Almonds, persimmons, quinces, and every species of fruit, indigenous to the north temperate zone, ripen here perfectly and bountifully.

JOSEPH A. SMITH.

Providence, Utah, May 31, 1923.

BUDDED and GRAFTED Nut Trees

Start right with my hardy Pennsylvania grown trees and be assured of success.

Attractive Catalogue Free.

I have this season a fine lot of stake trained Pecan, English Walnut, Black Walnut and Persimmon trees budded on root pruned transplanted stocks, that will please you and that will transplant easily and early. Write for catalogue.

J. F. JONES, The Nut Specialist
LANCASTER, PA.

Maryland Budded Walnut Trees Bearing Heavily

Indiana Pecans Showing Catkins

Editor American Nut Journal:

On my grounds at Brentwood, Maryland, I have this spring two Franquette and two Mayette Persian walnuts loaded with nuts. These were all grafted upon black seedlings in the spring of 1919, with scions sent me by J. F. Jones of Lancaster, Pa.

On the same grounds, two pecan trees, bought of Mr. Jones—a Butterick and an Indiana—are this year showing catkins. The Butterick has outgrown the Indiana about three to one. A Thomas black walnut supplied by Mr. Jones six years ago, has borne for the last three years; last year having nearly a peck of enormous nuts and now being covered with catkins for another crop. The tree has outgrown any other tree of any kind in the same period. It is now twenty feet high and about five inches diameter. For quick bearing, rapid growth and plenty of big nuts the Thomas is it.

These nut trees stand on the flat top of a

knoll; the soil is a hard clay, not over rich. They have not been cultivated, but are grown in sod, as have grown all my fruit trees from the start; the grass being cut and mulched around them every summer.

In grafting—whether fruit or nut—I have for years used no method other than the slip bark (or side-pocket). Since getting Dr. Morris' hot paraffin idea, results have been much more positive—almost as sure with nuts as with apples. I want to say that no person interested in nuts can afford to be without Dr. Morris' book on Nut Growing. Here we have a man. I doubt that he is as yet appreciated as the many-sided specialist that he is. But his footsteps will re-echo down many separate corridors of time, and not of the smallest amplitude will be the waves of vibration adown the numerous vistas of nut orchards arising responsive to the inspired prophecy of this practical dreamer.

JOHN F. KEENAN, M. D.

For Canned "Pecawns"

Editor American Nut Journal:

Conditions have been ideal throughout Texas for one of the largest pecan crops in her history. The nuts are now "set" and safe. Nothing but hail storms can destroy the crop and that will only be local and will cut down the general average but little if any. The worst enemy to the pecan is the "case-bearer" worm. But the almost total failure last year had two compensations from which we will derive the benefit this year. One was the rest it gave the trees to prepare the buds for this year's immense crop and the vigor to mature it. The other was starving out the case-bearers for want of pecan nuts, on which to thrive and propagate. Still a fair supply of these case-bearers is in existence this spring, but it will be impossible for them to materially hurt the crop. In fact they will be an advantage to my Halbert variety which bears so prolifically, by thinning them. Yet there is great danger for another year. There will be many of these case-bearers by July when they retire from their depredations as well as other enemies of the pecan, so that the naturally small to ordinary crop another year, may be totally destroyed as it was in 1922. I do not mean to say that these insects were the sole cause of the failure of 1922, but do say that there would have been some pecans on the common trees, had it not been for these insect pests. I gathered a small paying crop off my Halbert trees in 1922 in spite of these insects and unfavorable weather conditions.

Now some may allege that this report will "BEAR" the market on this delicious nut, which is called by our Northern friends as if they were PEAS canned, that is "Pea-can" while we of the South call them as if it was CORN, that is "Pea-corn." But there is no use in selling this now staple food product for less than a profitable price. The demand is growing faster than the supply. It is no longer a HOLIDAY NUT. The kernels can be kept indefinitely as a food product. A friend showed

me yesterday some nice sweet kernels put up in vacuum cans by a large St. Louis pecan dealer. So now we can really get any time during the year or years a big crop, fresh PEA-CANS canned.

H. A. HALBERT.

Coleman, Tex., May 13, 1923.

From President McGlennon

Fellow Member:

At the meeting of our Association on the 28th ult., the subject of increasing our membership was again discussed.

Mr. Olcott says that he believes that dissemination of information relative to the profits to be made from nut groves and orchards will do more toward interesting people to join the Association than anything else. And that may be so. After all is said and done it is usually the dollar that counts most in any phase of life and living.

Fortunes have been and are being made in nut culture—in the South with the pecan, in California with the walnuts and almonds, in Washington and Oregon with filberts. It has been rather decidedly indicated that the filbert is suitable for commercial planting in almost any of the Northern States, and as for the walnut, all one has to do to satisfy one's self that that is mighty profitable business here in the North is to go to Lockport and see the Pomeroy seedling walnut orchard. That orchard has produced a splendid crop of nuts every year for the past twelve years. I saw it last August and was actually astounded at the sight. Mr. Pomeroy tells me that the 1922 crop was over 6,000 pounds and that he sold it all at an average of better than 40c per pound. The orchard is about 12 acres in size, containing about 300 trees. I am sure all will agree that that is right profitable farming. There aren't very many crops that could make a better showing, and I am sure the expense of handling the Pomeroy walnut orchard is much less than would be required for almost any other crop on the same acreage; and the Pomeroy walnut is a most excellent nut. Proof of that is the fact that the Pomeroy's dispose of a large part of each year's crop to old customers.

PECANS

We are the pioneer growers of budded and grafted pecans in the South. Have a complete stock of the leading standard varieties. Can furnish trees we know will please and give satisfactory results. Catalog free.

INTERSTATE NURSERIES
C. M. Griffing & Co. Props., Jacksonville, Fla.

Texas Pecan Nursery Arp, Texas

THE PEOPLE THAT GROW
WELL-ROOTED PECAN TREES

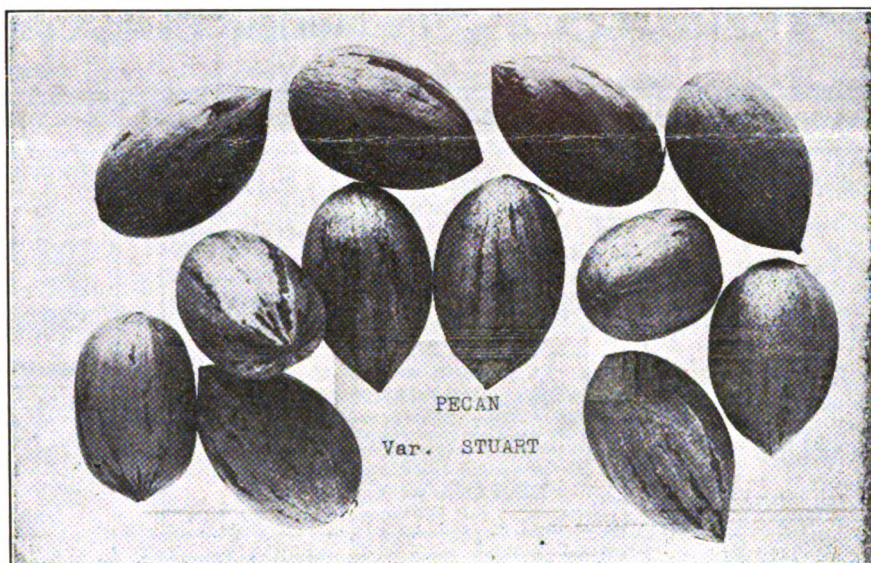
American Nut Journal

**DEVOTED TO NUT GROWING INTERESTS
GENERALLY THROUGHOUT THE AMERICAS**

Vol. XIX. No. 1

JULY, 1923

Per Copy 20c.



**STUART PECANS—Much Reduced in Size
One of the Most Popular of the Improved Varieties
See Overholser Article, Page 4**

39 STATE ST.



ROCHESTER, N. Y.

American Fruits Publishing Co.

A Proposition for Black Walnut Culture on a Large Scale

DEAR NUT TREE GROWER:

After years of search I have secured the three improved varieties of black walnuts that cover the entire field. These are:

The LEWIS black walnut, a table nut in a class by itself, and pronounced by experts superior in quality to Persian (English) walnuts and with easy cleavage and hardy.

The MORRIS black walnut, (named for Dr. Robt. T. Morris,) for confectionery and bakery trade, excellent quality, of easy cleavage and hardy, and

The GLORY black walnut for the figured or curly grain of the wood. Single highly figured black walnut trees have sold for \$4,000 each.

I own these three new varieties of black walnuts and am propagating the trees by budding and grafting according to the most modern methods. The nursery trees of these varieties of black walnuts will be sold under a sales contract or agreement similar to those used with the Golden Delicious apple and the Temple orange, in which, as a part of the purchase consideration, the buyer promises not to propagate these trees or permit anyone else to do so from his trees for thirty (30) years.

I am propagating these new varieties of black walnuts and my intention was to keep this nursery business for myself and go ahead slowly in the work. I was formerly in the tree nursery business for several years and know it can be made very profitable if run on a volume of production basis.

But the demand for these trees has become so large since the descriptions of them have appeared in the *American Nut Journal*, *American Fruit Growers Magazine*, *American Fruits*, and other publications within the last few weeks, that I am simply deluged with demands for these trees far beyond my capacity to supply. Could have sold several orders for 1000 to 2000 trees each of the Lewis black walnut alone, besides many smaller orders. One man offered \$10 each for a considerable number of these trees.

I want to make this my life work and the field and its possibilities are exceedingly large.

So to meet this demand for these trees more rapidly I have decided to form a company and let others join me on equal terms to get additional capital to swing this great opportunity at once in a big way.

I wish persons associated with me as shareholders who are interested in nut tree culture and who know something about the immense future of nut tree growing in those parts of the United States nearest to the great centers of population, where there are more than 100 million acres of land now idle or of small value that can be made the most profitable land of all by planting to these improved varieties of black walnuts.

In the primary and secondary commercial black walnut areas alone there are about 40 million acres of lands level and very fertile but of small value now, because subject to occasional over-flows, but these lands are the natural home of the black walnut. This is more than enough to make a state the size of Illinois or Iowa.

The United States Department of Agriculture states that there are 81 million acres of land mostly in the East and Central West now idle and fit only for trees. At least half of this land is suitable for black walnuts. At 15 trees per acre 40 million acres will take 600 million black walnut trees. The overflow lands will need as many more.

There are four and a half million farmers in the United States and if only two million of them plant 100 walnut trees each in waste corners of their farms and along their farm lines and highways, that will use 200 million trees.

These three purposes will take nearly a billion and a half trees!

This is not figuring black walnut groves on cultivable land, and other purposes. The leading nut tree authority in Iowa advises planting black walnuts on the best land in Iowa, because he says that he knows of nothing that will pay so well on the best land, and this is doubly true of these greatly improved new black walnuts.

The United States imports about \$1,000,000 a week worth of nuts from foreign countries. With these better varieties of black walnuts we can produce these nuts at home on land now idle and so of small value.

A pecan nursery in Georgia is rated at \$1,000,000 and the named sorts of pecans did it and they are a business of only a dozen years or so.

You know that budded or grafted nut trees sell at higher prices than any other class of trees and still the demand exceeds the supply.

With these improved kinds of black walnuts there is even a greater opportunity, because the field is so very much larger.

This will be a small company with compact capital. It will take years to catch up with demand for these trees. Only one-tenth of a billion and a half trees is 150 million trees. Or at 150,000 trees per year it would take 100 years to produce that number of trees.

There are other and even larger opportunities for profits in this enterprise besides the production of nursery stock, because it is a new industry with immense profit possibilities.

Write me at once for full details and special offer for getting in on the ground floor as a Founder of this new industry.

H. R. MOSNAT,

10910 Prospect Avenue,
Morgan Park, Cook Co., Illinois

PROFITABLE PECAN TREES

By careful methods of bud selection and culture we grow trees that yield Profitable Nut Crops. This fact is proven in our own large orchards and in the orchards of our customers. Our trees make satisfied customers.

We can supply all standard varieties. Make your reservations early to insure delivery when wanted.

Summit Nurseries
Monticello, Florida.

FOR SALE
5 ACRE PECAN GROVE LOCATED IN THE UNITED PECAN GROVES AT PUTNEY, GEORGIA. TREES PLANTED 9 YEARS AND IN GOOD CONDITION—UNDER CARE OF PAPER SHELL PECAN GROWERS ASSOCIATION.
PRICE, \$2,500—A BARGAIN FOR QUICK SALE. ADDRESS G. E. HADDEN, 6016 HAYES AVE., LOS ANGELES, CALIF.

Budded and Grafted
HARDY NORTHERN NUT TREES
Best varieties, grown in natural nut soil. Send for catalog. Have your seedling nut trees topworked to these fine varieties.
Information and estimate on request.
INDIANA NUT NURSERY
Rockport. J. F. Wilkinson, Prop. Indiana

ORCHARD OWNERS OF THE SOUTH-EAST AND GULF STATES

Reports furnished on pecan and fruit orchards, giving variety, age, size and condition of each tree; also notes on general conditions and needs of orchards. Care and management of orchards a specialty.

HORTICULTURISTS INCORPORATED
6th Floor, Exchange Bank Building
Albany, Ga.

PECAN TREES

We Grow Them Right
We Pack Them Tight
We Price Them Right
Southern Nut Tree Nurseries
THOMASVILLE, GA.

PECAN TREES

100,000 TREES—STANDARD VARIETIES
WE GROW NOTHING BUT PECAN TREES
HIGH QUALITY—SERVICE THE BEST

SIMPSON NURSERY CO., MONTICELLO, FLA

THIS SPACE
\$2.50 Per Month Under yearly Contract
Under less than yearly term:
\$2.80 Per Month



NEW EDITION FREE

A practical guide showing how to bud pecans. Tells how to grow trees 12 inches in diameter by the end of the 8th year, which yielded 400 lbs. nuts per acre.

Trees, Nuts, Groves for sale direct without agent at attractive reduced prices
B. W. STONE, Thomasville, Ga.

SUCCESS

and other leading varieties. Also citrus
BECHTEL PECAN NURSERIES
Ocean Springs, Miss.

PECAN TREES

Plant them this year! Buy direct from nursery and save agent's profit. All standard varieties; quality and service the best. Write us for prices.

FLORIDA NURSERIES
W. W. Bassett, Prop., Monticello, Fla.

AMERICAN NUT JOURNAL CHIEF EXPONENT OF AMERICAN NUT INDUSTRY

Of National Circulation

Covering Every Phase of Nut Culture

Subscription: - - \$2.00 Per Year
Advertising: - - \$2.80 Per Inch

Official Journal { National Pecan Growers Association
Northern Nut Growers Association

AMERICAN FRUITS PUBLISHING COMPANY

39 State Street, Rochester, N. Y.

AMERICAN NUT JOURNAL --- JULY, 1923

EDITORIAL DEPARTMENT—Communications on any subject connected with Nut Growing and Distribution are cordially invited by the editor; also articles on this subject. We shall be pleased to reproduce photographs of trees of interest, methods and scenes connected with the Nut Industry; portraits of individuals, etc. Suggestions are cordially welcomed.

ADVERTISING—Advertising forms close on the 10th of each month. If proofs are wanted, copy should be in hand on the 1st.

Advertising rate: 20 cents per agate line; \$2.50 per column inch for any amount of space.

Advertisements that do not represent reliable concerns will not be accepted.

SUBSCRIPTIONS—The "American Nut Journal" will be sent to any address in the United States for \$2.00 a year; to Canada or abroad for \$2.50 a year. Three years: In United States, \$6.00; Canada, \$6.50.

Add ten cents for exchange unless bank draft, express or postal money order is used.

WHAT THIS JOURNAL STANDS FOR—Reliable information on all phases of the Nut Industry. It is for the advancement of Nut Growing in general; it is in no way confined to the interest of a particular kind of nuts, nor of a particular section. It is broad in scope and absolutely independent. The aim of "The American Nut Journal" is to stimulate thousands of persons into developing interest in one of the greatest food supplies of the future—to line the roadsides and fill the waste places with trees of a sort which yield dollars worth of fruit every year instead of the mere bunches of leaves resulting from present shade and ornamental planting. At the same time it will record the progress of the industry, the latest descriptions in the note book of the biologist and plant physiologist, the rapidly expanding knowledge of methods, the increasing acreage, and in short the news as it develops of an industry whose importance is recognized by an increasing number of persons in all sections.

Entered as second-class mail matter June 6, 1914, at the post office at Rochester, N. Y., under the Act of March 3, 1879.

AMERICAN FRUITS PUBLISHING COMPANY INC.

Ralph T. Olcott, Editor and Manager

121-123-125 Ellwanger & Barry Bldg., Rochester, N. Y.

Classified Business Announcements In This Issue.

Albany Pecan Nut Exchange Marketing of Pecans.....	13	Mosnat, H. R.....	Black Walnut Orchard.....	2	
Bennett, W. W.....	Pecan Trees.....	2	Nelson, A. H.....	Pecan Farm for Sale.....	13
Bechtel's Pecan Nurseries.....	Grafted Pecan Trees.....	2	Northern Nuts.....	Sources Wanted.....	20
Bissell Co., T. E.....	Special Tractor Disk.....	19	"Nut Growing".....	New Book.....	19
Culver, L. F.....	Pecans, Introductory Prices.....	19	Nut Information.....	Special Topics.....	3
Florida Nurseries.....	Pecan Trees.....	2	Nuts as Staple Food.....	Dr. J. H. Kellogg.....	3
Griffing & Co., C. M.....	Pecan Trees.....	20	"Nut Trees for the North".....	Expert Advice.....	3
Hadden, G. E.....	Pecan Grove for Sale.....	2	Ryan.....	Black Walnut Grove.....	13
Horticulturists, Inc.....	Southern Pecan Experts.....	2	Simpson Nursery Co.....	High Grade Pecan Trees.....	2
Indiana Nut Nursery.....	Northern Pecan Trees.....	2	Selkirk, Edward A.....	English Walnut Grove.....	13
Inter-State Nurseries.....	Pioneer Pecan Growers.....	20	Southern Nut Tree Nurseries.....	Pecan Trees.....	2
Jacoviac, Maurice.....	European Walnuts.....	13	Stiles, Harvey C.....	Tree Expert.....	20
Jones, J. F.....	Grafted Pecan Trees.....	20	Stone, B. W.....	Pecan Trees, Nuts, Groves.....	2
Lancaster Nut Nurseries.....	Northern Nut Trees.....	20	Summit Nurseries.....	High Grade Pecan Trees.....	2
Logical Market Place.....	For Selling Nuts.....	19	Texas Pecan Nursery.....	Budded Pecan Trees.....	20
Manual of Grafting.....	Biederman Method.....	13	Turk, Richard H.....	V. Franquette Walnut Trees.....	16
Monticello Nursery Co.....	Budded and Grafted Pecan Trees.....	13	Wilkinson, J. F.....	Grafted Pecan Trees.....	2
			Woodson, Robert E.....	Nut Cracking, Grading Machines.....	15

IMPORTS OF NUTS INTO THE UNITED STATES, FOR CONSUMPTION, DURING THE LAST THIRTEEN YEARS

(Compiled by Bureau of Commerce and Navigation, Department of Commerce, Especially for the "American Nut Journal.")

KIND	1909	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919	1920	1921
Almonds—not shelled.....	2,120,632	6,810,056	3,762,654	5,242,563	2,363,860	5,501,059	4,684,598	2,368,369	4,901,168	6,149,374	7,482,538	6,480,732	5,068,215
Shelled.....	8,538,054	10,495,750	12,160,633	11,692,988	12,655,057	13,896,621	12,168,153	13,210,668	19,160,258	21,544,757	28,007,908	18,769,626	21,572,634
Apricots and peach kernels.....		27,854	13,531	7,939	18,769	18,572	67,164	11,926	250,075			65,175	32,088
Coconuts in the shell.....	\$1,246,463	\$1,298,970	\$1,704,262	\$2,012,203	\$1,793,713	\$2,150,500	\$1,593,666	\$1,891,328	\$2,583,560	\$2,490,368	\$4,053,282	\$4,230,221	\$2,263,060
Coconut Meat broken or Copra not shredded, desiccated or prepared.....	23,742,518	20,830,539	38,081,984	64,505,787	34,283,592	44,459,158	88,680,382	108,507,765	247,043,127	430,649,332	258,637,781	215,188,461	189,320,960
Desiccated, shredded, cut or similarly prepared.....	5,461,602	5,985,308	6,661,850	5,396,465	6,826,095	9,307,924	5,866,806	7,947,380	10,491,796	20,269,909	29,637,674	30,631,029	35,633,497
Cream and Brazil.....	409,644	461,496	277,679	21,601,008	11,933,139	11,431,531	21,483,319	12,489,217	16,230,023	11,282,088	14,076,358	13,035,436	17,102,046
Filberts—not shelled.....	7,365,837	10,026,961	10,084,957	8,375,960	8,586,278	10,360,072	10,003,552	16,468,547	7,432,524	16,468,547	16,747,349	14,866,364	14,092,336
Shelled.....	1,413,391	2,332,606	1,368,835	1,450,620	1,798,147	1,722,705	1,259,540	2,280,757	4,245,863	3,778,906	4,711,293	4,233,107	
Marrons, crude.....		10,270,398	9,968,879	14,545,345	10,157,321	18,849,257	12,549,959	15,754,796	6,275,030		5,021,146	29,484,637	23,340,988
Olive nuts, ground.....	\$580	\$478	\$236	\$206	\$312	\$385	\$25	\$112	\$420			\$132	\$189
Palm and Palm Nut Kernels.....	\$2,752	\$6,907	\$5,744	\$7,970	\$4,872	\$23,127	\$31,900	\$1,104,885	\$626,435	\$16,905,313	\$5,610,056	\$8,329,034	\$280,194
Peanuts or Ground Beans.....													
Unshelled.....	7,326,371	11,297,172	11,055,823	12,660,433	12,140,612	17,298,778	14,075,387	9,623,411	7,710,082	1,970,797	5,667,354	7,222,486	4,803,677
Shelled.....	1,302,919	16,089,919	7,821,505	3,127,829	7,823,173	21,819,101	11,695,507	19,739,888	27,548,928	67,746,831	24,179,687	103,552,486	30,406,963
Pecans.....	1,480,289	3,349,460	2,333,037	2,607,227	1,803,434	2,621,161	2,032,539	1,268,382	4,076,933		2,194,680	1,082,390	
Walnuts—not shelled.....	17,432,885	23,269,974	21,146,116	22,208,845	16,363,046	16,134,211	20,988,326	22,610,418	17,177,992	3,304,003	21,235,078	17,339,096	31,821,639
Shelled.....	8,781,908	10,960,968	11,244,054	10,713,286	10,083,622	11,636,053	10,552,956	13,445,790	12,257,583	9,707,401	10,260,889	13,972,917	13,264,089
All other shelled or unshelled, not specially listed.....	9,938,337	3,584,544	2,962,663	3,050,989	3,600,056	7,426,313	3,272,492	2,772,589	2,769,634		3,763,973	3,880,676	
Total of nuts imported.....	\$8,549,967	\$12,775,196	\$14,265,372	\$15,626,485	\$13,508,307	\$19,815,713	\$16,865,244	\$20,594,434	\$33,667,688	\$49,930,283	\$17,499,09	\$58,752,801	\$37,378,572

Nut Culture Information

Reprint folders on topics discussed in American Nut Journal. 10 Cents Each

Grafting and Budding the Walnut—U. S. Dept. Agriculture.
Pecan Areas of the United States—W. P. Reed.
Walnut Trees For New England—Dr. Robert T. Morris.
Some Walnut Varieties—Dr. L. D. Batchelor.
Chip Buds For Nut Trees—Charles L. Edwards.
Grafting, Budding, Topworking—Dr. W. C. Deming.
Breeding Chestnuts for Disease Control—U. S. Dept. Agr.
Advent of Nuts as Staple Food—Dr. J. H. Kellogg.
Underworking Nut Trees—Charles L. Edwards.
The Ubiquitous Black Walnut—T. P. Littlepage.
Average Yield of Pecan Orchard in S. W. Georgia.
Value of Nuts As Food—Dr. W. C. Deming.
Improved Black Walnut a Good Investment—Henry Stabler.
Status of Pecan Industry—C. A. Reed, U. S. Nut Culturist.
Sources of Supply of Hazel Nuts—Bulletin Imperial Institute.
Top-Grafting the Walnut Tree—Ferd Groner.
Black Walnut As a Meat Producer—Henry Stabler.
\$2,000 an Acre by Top-working Pecan Trees—Stiles.
Outline of Northern Nut Culture Activity—Dr. W. C. Deming.
Establishing the Filbert Grove—George Dorris.
Top-Working Northern Pecan Trees—J. F. Wilkinson.
Nut Trees for Highways and Public Places—W. S. Linton.

American Nut Culture—24-page Pamphlet Survey.
East Texans Reap Fortunes on Pecans.
Hazel Blight—Dr. Robert T. Morris.
Co-operating in Marketing Pecans—William P. Bullard.
Cost and Development Pecan Unit Orchards—J. M. Patterson.
Why Pecan Trees Bear Alternate Years—C. A. Reed.
List of Nut Trees for Northern Planting—W. G. Bixby.
Franquette Walnut Orcharding Pays Well—Turk.
American Nut Industry—C. A. Reed, Nut Culturist.
What Nuts to Plant in Northern States.
Pecan Rosette; Practical Treatment—W. A. Weaver.
English Walnut: Where To Plant It.
Nut Tree Grafting by an Easy Method—Dr. Robert T. Morris.
Purchase of Chestnut Tree With Reference to Blight—G. F. Gravatt.
Quick Results in Pollenizing Pecans—E. E. Rislen.
Nut Trees to Reduce Food Costs—Chas. Lathrop Pack.
How To Guard Against Faulty Nuts—Harvey C. Stiles.
The Romance of the Pinon Nut Industry in New Mexico.
Soil Fertility; Fertilizer Problems in Pecan Culture—J. J. Skinner, U. S. Department Agriculture.
The Future of the American Grown Filbert—Richard H. Turk.
The Future of Nut Growing—Dr. Robert T. Morris.
The Lewis Hardy Black Walnut—H. R. Mosnat.

AMERICAN FRUITS PUBLISHING CO., 39 State Street, Rochester, N. Y.

THE POSSIBILITIES OF PECAN GROWING IN CALIFORNIA

BY E. L. OVERHOLSER, Assistant Professor of Pathology, University of California

THE pecan is related to the hickory nut and belongs to the same botanical family as the walnut. The pecan is an American species, native of river bottom land of the central to southern Mississippi Valley and tributaries. Judging by the members of inquiries received concerning the possibilities of pecan growing in California, a brief statement of the cultural distribution, requirements, characteristics, limitations and varieties, of this nut producing plant would be of general interest. The discussion which follows, however, is largely based upon experience in other states. Commercial plantings are lacking in California, and there is limited material from which to formulate a judgment regarding the possible profitability of the pecan here.

Importance. The pecan, in the United States, ranks second as a nut of commercial importance, being almost one-half the value of the English walnut, and nearly twice that of the almond. East of the Mississippi it is the most important commercial nut. Its rapid growth, precocity of production, its thin shell, easy cracking quality and pleasing flavor make the pecan promising as the most important nut bearing tree of the United States. The nut has a high food value and is rich in fat, having about 70% in the kernel.

Cultural Distribution. The pecan has been introduced into most of the states east of the Mississippi river. Few trees, however, are found north of the latitude of lower Virginia with the exception of native trees occurring in Western Kentucky, southern Indiana, Illinois, Southeastern Iowa and Missouri.

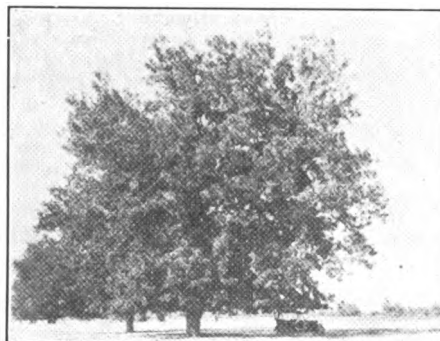
The pecan is not adapted to cold northern states, to high mountainous sections or to low land, where water stands on or near the surface of the ground for any period of time. It requires a rather mild climate with a long growing season. In the San Joaquin Valley, however, it does not die back or winter kill as badly as the Persian walnut.

Producing Centers. In order of the quantity of production the rank of the states is about as follows: Texas, Louisiana, Oklahoma, Arkansas, Kansas, Missouri, Kentucky, Tennessee, Mississippi, Indiana and Illinois.

Pecan Culture in the West. Compared with the southern states, until recently, there has been little interest in pecan growing in the West. Occasionally small plantings are found in the Pacific coast states. The varieties so far tested in cooler coastal sections do not bear as regularly as desirable and some individuals have experienced difficulty because of the late ripening of the crop. The nuts do not mature and drop, until late in the season. J. L. Quail, assistant farm advisor, of Merced county, has observed a similar tendency to ripen later than desirable in the lower San Joaquin Valley. With the commercial viewpoint this would be disadvantageous in marketing, in that it would be difficult to place the crop before the trade in time for the Thanksgiving and Christmas holidays. Proper varieties adapted to cool growing

conditions might ripen earlier. For example, Mr. Quail has noted that the variety called the Indiana ripened early and was ready for harvest about the same time as the walnut in the Farmington community.

The most favorable reports concerning the behavior of the pecan, on the Pacific Coast, have come from the interior valleys of central and northern California. Small plantings and scattered trees, mainly seedlings, are growing near the following points: Chico, Davis, Woodland, Winters, Vacaville, Elk Grove, Stockton, Fresno, Farmington, Bakersfield and elsewhere. Reports from parts of Southern California are not encouraging because of trouble with pecan rosette. Dr. W. L. Howard also reports



Seedling Pecan Tree, 50 Years Old, Near Yuba City, California

that pecans in the Pomology test orchard at Davis exhibited pecan rosette.

Some individuals believe the San Joaquin and Sacramento valleys offer opportunities for pecan growing. The industry, however, is as yet unproven and, therefore, must be considered as an experiment in California until the proper varieties have been found, and the correct cultural methods determined. The pecan, however, is a beautiful shade and ornamental tree. It may be planted for that purpose and incidentally much can be learned concerning its behavior in various parts of California. (Fig. 1).

Soil and Moisture Requirements. The soil should be deep, fertile, sufficiently porous to admit proper aeration, and while well drained it should not become dry. Heavy clay soils decrease the size of the pecan nuts.

Botanical Characteristics. The pecan tree becomes 75 to 175 feet high with an occasional diameter of six feet. The bark is rough and deeply furrowed. The flowers are monoecious, that is, the male flowers and the female flowers are borne separately upon the same tree.

The male flowers, or catkins, five or six inches long, are usually borne from the uppermost lateral buds on the last season's shoots. The female flowers, terminal on the shoots of the current season's growth, are produced singly or in clusters of from two to nine. The male flowers tend to appear before the female flowers and hence are most likely to be injured by frost. The male flowers do not appear until the terminal shoot has grown six to eight inches.

Pollination. The pecan is wind pollinat-

ed and hence unfavorable weather conditions at time of bloom may be especially injurious. Experiments show that the common varieties can be placed in two groups, as a result of their floral characteristics and their pollination requirements.

In the first group, the female flowers become receptive about the same time that the male flowers shed their pollen. With this group, therefore, no special provision is necessary with respect to cross-pollination. Varieties which have been placed in Group I are, Alley, Centennial, Haven, Mobile, Pabst, Rome, San Saba and Success.

With the varieties placed in Group II, the female flowers are receptive from two to ten days before the male flowers shed their pollen, hence a large percentage of the stigmas are dried before pollen is available and pollination is not effected.

Varieties placed in Group II are, Appomattox, Curtis, Delmas, Frotscher, Money-maker, President, Russell, Stuart, Teche, and Van Deman. The pollen from varieties in Group I, however, is available at about the correct time to pollinate the female flowers of the varieties in Group II. Hence, the varieties listed in Group II can be pollinated by those listed in Group I.

Planting. The pecan, because of its deep tap root, is difficult to transplant. Care must be taken to prevent drying while the tree is out of the ground, by covering the roots and top with wet sacks. The tap root is cut off about two feet below the surface when dug for transplanting.

Upon rich deep soil, with abundant irrigation water, planting should be 60x60 feet. Fillers such as peaches, figs and other fruits, not requiring a large amount of space, might be used until the pecan trees become sufficiently large to require the entire area.

Culture. The tree is headed about five feet high and requires little pruning other than the thinning out of crowding or interfering branches and the removal of the dead wood. The better varieties may be expected to bear when seven to ten years of age, although commercial yields are not obtained until the trees are ten to twelve years old. An average yield for a mature tree is about one hundred pounds. In other states the better pecan orchards are cared for and the crop harvested much as the walnut in California.

Varieties. Experience with pecans in California is so limited that it is impossible to recommend, with certainty, the best variety to plant. It is largely a question of pioneering on the part of the grower to determine the varieties best adapted for each section.

Professor G. W. Adriance of the Agricultural College of Texas suggests that the pecans of Western Texas, which are of excellent quality, may do better in the interior valleys or warmer sections of California than the other types. He recommends the Texas Prolific and Burkett and states that the Halbert and San Saba might also be tried.

Additional varieties are given in Table 1.

Certain varieties as the Busseron, Greenriver, Indiana, Major and Warrick are indicated as promising for the northern range. These varieties might be tested in northern California especially in the cooler coastal or foothill regions.

Other varieties such as Frotscher, Pabst, Moneymaker, Stuart and Alley are cosmopolitan and widely disseminated and might prove adapted to the interior valleys or warmer coastal sections of the state. The Schley, Delmas, and Van Deman probably would not be adapted to the coastal sections, because of their susceptibility to pecan scab, where the humidity is fairly high.

Diseases. The pecan is by no means free from diseases and insects. It is problematical as to what troubles would be most serious in California. With the efficient quarantine service many pest troubles elsewhere may be kept out of California. With certain varieties, however, the pecan scab is likely to be serious in the warmer more humid sections. This disease is recognized by a dark green to black smoky, or velvety, superficial growth on the leaves, twigs and nuts. It is controlled by growing resistant varieties, such as the Stuart, (cover illustration) Frotscher, Moneymaker, Teche, Russel and Success.

In parts of Southern California, there is indication that pecan rosette may be troublesome. This disease is characterized by undersized crinkled, yellow mottled, narrow leaves. The diseased branches are short and give a rosette appearance. The disease progresses from the extremity downward. The trouble is not infectious and apparently not of parasitic origin. It cannot be eliminated by careful pruning or even cutting back to a stump. Healthy buds or scions budded or grafted upon diseased stocks develop rosette. Affected

trees when transplanted sometimes recover. A proper soil texture, with sufficient moisture and organic content, lessens the amount of the disease.

The brown leaf-spot is another common leaf disease distributed throughout the pecan belt. Dark brown to reddish spots appear on the upper surface, which become greyish on the lower surface as the spots become older. This disease, however, is not serious upon thrifty vigorous trees, especially if the leaves are kept plowed under.

Insects. The principal insects which may injure the nuts are the pecan nut case-bearer, pecan shuckworm, and pecan weevil. Those injuring the foliage and shoots are the pecan leaf case-bearer, pecan cigar case-bearer and fall webworm.

Budding Notes From Texas

After reading the more or less fervid arguments about various budding methods, and the claims set forth by the proponents of each kind in the effort to show that it is the only simon-pure, blown-in-the-bottle method, it is refreshing to run across the work of some fellow who goes ahead and does something that does not agree with the accepted versions—and who gets results.

Such an instance was recently noted on the farm of D. F. Moore of Bend, San Saba county, Texas, which might cause the pro-grafting-wax, pro-waxed cloth and pro-paraffin prophets to beat their breasts and vow to high heaven that "there ain't no sich animal." While doing some budding in his Nursery and on seedling trees about the farm, in May, Mr. Moore experimented for his own satisfaction by putting in an equal number of buds by three different methods of treatment—all patch buds—one-third being covered with wax cloth and tied with string, one-third on which tie and grafting wax were used, and one-third by the H bud method, on which neither cloth nor wax was

used. The results will be a distinct shock for the adherents of the covered methods.

Of the uncovered buds, 95% set readily and are living. Of the covered buds, both the cloth and wax covered, about thirty per cent are alive. The uncovered buds are putting out splendidly and appear to be as thrifty as one could wish to see.

This may or may not prove much of anything—except that it would seem to prove that there is no dyed-in-the-wool method of making pecan buds live and have their being. It is interesting, however, to note that in his excellent bulletin, "The Pecan in Texas," put out by the Texas State Department of Agriculture, Mr. J. H. Burkett refers to the uncovered method under the sub-title "H. Budding," as follows:

"Often this method of budding is used without either waxed cloth patches or wax to cover the buds. This is entirely permissible during the warm summer season."

Another interesting result of experimental budding is noted on a tree which stands alongside the handsome residence of F. F. Edwards, a prominent ranchman of San Saba county, this residence being located in the city of San Saba. The tree was a seedling, about two inches in diameter, with three principal limbs, each of which was about three-quarters of an inch in diameter. On each of these limbs, S. F. Clark, county agent of San Saba county, and A. W. Woodruff, secretary of the San Saba Pecan Company, put on a bud on April 23rd. All three buds set promptly and made rapid growth. Forty-nine days later, on June 11th, each of the new shoots had made a growth of more than three feet, and a leaf, taken from one of them by Mr. Woodruff and sent to Mr. Burkett, measured 11 inches in length and five and one-half inches in width. This leaf was exhibited to a number of witnesses before being sent away.

The variety from which these buds were

(Continued on page 13)

ORIGIN AND CHARACTERISTICS OF LEADING VARIETIES OF PECANS

Variety	Origin	Dissemination	Size	Thickness of Shell	Quality	Remarks
Burkett	Texas	Adapted to arid regions	W. Large	Thin	Excellent	Very productive
Busseron	Indiana	New; Promising for N. range	Medium	Average	Very good	Prolific
Delmas	Miss.	Widely disseminated	Large to very large	Moderate	Highest	Blooms early; ripens crop late; subject to scab
Frotscher	La.	Widely. Popular in S. W. Ga. and La.	Large	Very thin	Medium	Free from disease; shy bearer
Greenriver	Ky.	New; promising for N. range	Below medium	Average	Excellent	
Indiana	Ind. Seedling of Busseron	New; promising for N. range	Medium	Average	Very good	Prolific. Ripens crop early
Major	Ky.	New; promising for N. range	Slightly below medium	Thin	Excellent	Kernel unusually plump
Moneymaker	La.	Widely disseminated	Medium	Moderate	Fair	Very prolific. Ripens crop early in fall.
Pabst	Miss.	Widely disseminated	Large	Somewhat thick	Good	Generally prod.; late coming into bearing
Schley	Miss.	Widely, one of best known	Medium to large	Very thin	Very good	Mod. prod.; susc. to scab; one of most popular varieties
Stuart	Miss.	Most extensively planted	Medium to large	Average	Good	Cracking quality fairly good. Mod. prod.
Success	Miss.	New	Large to very large	Medium thin	Very good	Cosmopolitan Highly prolific
Texas Prolific	Texas	Appears to be adapted to W. arid sections	Large	Medium	Rich and sweet	Usually prolific
Van Deman	La.	Widely disseminated	Large to very large	Medium thick	Rich, very good	Losing popularity due to susc. to scab
Warrick	Ind.	New; promising for N. range	Slightly below medium	Moderate thin	Rich, excellent	Parent tree prolific

Correcting Conditions to Induce Pecan Trees to Bear

On Rolling Land Erosion Due To Improper Methods of Cultivation Has Been of Great Detriment to Trees—Special Attention for Trees of Bearing Age Which Do Not Produce Crops.

By J. C. Britton, Albany, Ga.

THERE are some conditions existing in our pecan groves which I believe ought to be brought to the attention of those who have purchased the groves, as well as those who have developed and are caring for the grove at the present time.

During the several months I have been making detailed inspections of various pecan groves, I find in nearly all the groves, especially where the land is at all rolling, that in certain places erosion has been severe to the very great detriment of the trees. This erosion has been brought about very largely by improper methods of cultivation. In a great many cases, I have found the upper roots of the trees entirely exposed. Also, where this erosion has taken place and the soil is very thin by reason of this, that a great many roots have been cut by plows and other cultivating implements. I have noticed, too, that for several years the better trees are getting better and the poorer trees are getting poorer. In other words, the great variation in the size and condition of trees is becoming greater each year.

It is not my object unduly to alarm the purchaser of pecan groves. Neither is it my desire to cause any trouble for those who have developed groves or for those who are caring for groves, but rather to bring about such changes in the cultivation and management of groves as will prevent the severe erosion of the soil and the cutting of pecan roots by farm implements.

Deep plowing in a pecan grove where the soil is thin means death to the tree sooner or later. If the present methods are followed in the future, and the erosion and root cutting allowed to continue, the final outcome will be that our groves will have a few excellent trees in the lower, richer portions, and, on the higher or sloping parts, there will be no trees at all. Where the land is high and level and erosion only slight, the trees may live a long time, even where deep plowing is practiced. But, unless the soil is very deep, this unusual root cutting will finally cause the trees to rosette and die.

Also, I have noticed that where trees are suffering from erosion and root cutting, that attacks from borers and scab are very much worse than on healthy, well fed trees.

I hope the purchaser of pecan groves, as well as those who are doing the cultivating, will not misunderstand my efforts in trying to bring about certain changes. I am doing it only for the good of the cause in general. I would not do either party in the case the least injury or injustice. Neither have I intentionally practiced favoritism in any case. I have tried to report the conditions of the groves exactly as I have found them.

If the managers of pecan groves would pay more attention to the trees that are on the slopes and making very little or practically no growth on account of erosion, these backward trees would soon take on new life and produce profitable crops.

At the present time, many of them, although of bearing age, are producing no crops at all. They should be cultivated with the contours and not straight up and down the hills. They should also be mulch-

ed if possible, and in some cases where the land slopes to any considerable extent, the groves should be permanently terraced. Also, deep plowing close to the trees, or in any part of the grove if it is over ten years old, should be stopped altogether. There is really no reason for plowing the land deeply at any time. A disc harrow will do all that is necessary to be done even to the turning under of the cover crops. In reality, our cover crops are of very little benefit, because, on the sloping land, where the soil is poor and thin, beans or peas, or in fact any cover crop, makes very little growth. The cover crops, as they are now handled, are actually causing the better trees to become still better and the poorer trees to become still poorer, because in the low, rich places where the trees are already well fed, the cover crops make a tremendous growth by feeding them still more. On the higher, thinner places, the cover crops make practically no growth at all and the trees are actually injured instead of benefited by the extra pull on the soil by the cover crop. The trees on the slopes and thin places should be liberally fertilized. It not being necessary at all to fertilize in the low, rich places because finally they will get some of the fertilizer anyway. I am certain that no one interested in the pecan business in any way, whether he be owner or manager, wants to see a large percentage of the trees in their groves die out and finally have a few excellent trees in the low, rich places. This is certainly a condition that no one wants to see, and yet it is exactly the condition that we are going to get if we continue to practice our present methods.

My advice to those managing pecan groves is to practice shallow cultivation at all times and always in the direction of contour lines. Also, I would strongly advise that the trees on the slopes and thinner parts be mulched if possible, also fertilized either with compost if it can be had or with commercial fertilizers. It does not make very much difference what kind of fertilizer is used because the trees on such places are slowly but surely starving to death and any kind of fertilizer will be beneficial to them.

I hope that the managers of pecan groves will give this matter serious consideration and change their methods radically. I hope also that the owners of pecan groves will insist on certain changes that I have suggested, because, as I see it, it is only by adopting some such methods as I have outlined above that we will be able to keep any of our pecan trees living and growing and bearing.

The United States exported peanuts during May 1923 to the amount of 244,494 pounds to Quebec and Ontario; 68,032 pounds to other Canadian provinces, 17,862 pounds to Cuba, 19,000 pounds to Bermuda and Jamaica, and from 1000 to 3000 pounds to some other countries. The United States imported peanuts during May to the amount of 8,389,048 pounds from China; 1,632,724 pounds from Japan; 50,000 pounds from Spain; 33,712 pounds from Java and Madura.

If it relates to nut culture it should be in the AMERICAN NUT JOURNAL. Please send it in.

Pecan Growing in Virginia

Wm. N. Roper, proprietor of the Arrowfield Nurseries, Petersburg, Va., has an article on pecan culture in Virginia, in the Petersburg Progress and Index-Appeal. Mr. Roper says:

Seventeen years ago marked the beginning of the development of pecan growing in Virginia. Since that time very extensive experiments have been conducted with stocks, methods of propagating and varieties. The result is that the person who plants pecan trees in Virginia at this time can do so with the knowledge that he may avoid the mistakes of those who set out trees before so much definite information had become available.

Modern methods of producing pecan trees bridges over heretofore long lapse of time between the planting of the trees and the harvesting of the nuts. Trees of right varieties, set out in Eastern Virginia, begin to bear in five or six years and when they are ten years old the crops of nuts they produce are worth from \$12 to \$20 per tree. With trees set 50 feet apart each way, this will mean an income of \$200 to \$340 for each acre of 17 trees at ten years of age and the yields will increase for many years. There are individual trees just south of us which, at 15 years of age, often produce from \$100 to \$200 worth of nuts in a single year.

Let the farmers understand what a productive tree the pecan is and what large returns it gives for a little care and there will be few farm owners in this same section of the state that will not have a dozen or more trees growing around the buildings, along the fence rows or in the fields.

The question often is asked, "Is there danger of pecan planting being overdone, or of there being a glut of the pecan market in the near future?" A nut as choice as a pecan will make a great demand for itself when there is a sufficient quantity produced to meet home needs, and the foreign countries learn how delicious they are. The pecan is not grown anywhere in the world except in the United States, making it necessary for the entire world to get its supply from us; and there are only certain areas of this country in which they may be grown commercially. There is no need to fear that the pecan industry will be overdone, for it will take many years yet, even at the present rate of planting, to produce pecans enough to satisfy the home demands for them. A prominent northern publisher, in a public address, recently deplored the fact that pecan growers do not advertise, as so many people want to know where they can get choice pecans. "The people who grow pecans," he said, "are doing a commercial business and do not have to advertise, for they can't furnish enough nuts to meet the demand from those who already know about them. There is no occasion to advertise for customers, as customers are flocking to them."

The first question asked by nine out of ten prospective planters: "Is it a large, paper-shell pecan?" What he should ask and insist on knowing first of all is: "Is the variety adapted to the locality which it is to be planted, how evidenced, and is it budded?" If the Nurserymen or salesman cannot answer these most important questions, go elsewhere and find someone who can, for this information is now available.

The varieties of pecans offered by all reliable nurserymen come under the head of "paper shell" which only means "thin shell." Of course, some have thinner shells than others, but the shells of all the standard varieties will be found to crack with reasonable ease.

For the past few years the stress, particularly of the "tree salesman," has been put on size. The extra large pecan is always poorly filled and is usually worthless for all practical purposes north or south. The nut to be preferred is one of medium to large size.

Commercial Practice in Budding and Grafting Pecans

Address by Fred R. Brison, County Agricultural Agent, San Saba County, Texas, Before Texas Pecan Growers Assn.

WE ARE prone to regard budding and grafting as rather recent additions to the arts of plant-craft. This, however, is not true. The Romans over two thousand years ago practiced some crude forms of grafting. Unfortunately, however, knowledge of it was kept as a class or professional secret for a long time. And it has been only within comparatively recent years that much knowledge about budding and grafting has been available to the masses of people. Still more recent has been the evolution, perfection, and introduction of methods of budding and grafting by the use of which the pecan can be successfully propagated.

Within recent years the public has begun to appreciate the pecan. With this increased appreciation has come a desire to grow the standard varieties of pecans, or so-called "paper-shells." These standard named varieties can be perpetuated—not by reproduction from seed—but only by budding or grafting seedling pecan or hickory nut trees with buds or scions obtained from trees the variety of which it is desired to propagate.

The early pecan propagators and Nurserymen quite naturally used or attempted to use the methods of budding and grafting that were successful in the propagation of apples, pears, peaches and the other more common fruit and fruit trees. These methods were the T-bud, cleft graft, and whip graft, principally. They were found to be generally unsatisfactory. Continued failures, however, served to stimulate the typical American spirit of inquiry and research, and as a result we now have the chip-bud, bark-graft, patch-bud, and others. All of these may be used with varying degrees of success depending upon the natural skill and aptitude of the operator and the attention he pays to the essential details of the budding operation.

CHIP-BUD

The chip-bud is especially adapted to use on trees in the Nursery row—trees from one-half to one inch in diameter. The bud-wood should preferably be of equal size though it may be somewhat smaller. The work should be done during the month or six weeks immediately preceding the growing season. The buds used must be thoroughly dormant. The best buds are found near the base of the previous season's growth. The chip-bud method is fairly successful, varying somewhat from year to year. Its two principal advantages are: If the bud lives it has a long growing season and will produce a marketable Nursery tree by fall. If the inserted bud does not live little injury has been done the tree and it can be patch-budded later on in the season.

BARK-CRAFT

The bark-craft is especially adapted to top-working large trees. The work may be done during the early part of the growing season of the tree. Only thoroughly dormant bud-wood or scions should be used. The grafts may be inserted in stock from one to three inches in diameter. In top-working large trees it is necessary to insert several scions, one or two in each of the main limbs of the tree. It is a common practice to insert two scions in each limb or stock to increase the chances of success; in the event both live, only one should be

allowed to grow. Bark grafts make a strong vigorous growth the first season. It has the advantage of leaving the tree in poor shape if not successful.

PATCH-BUD

The patch-bud is the most successful method of propagation used on the pecan. It may be used with equal success upon Nursery trees and limbs with thick bark two or three inches in diameter. The season for patch-budding is long; it may be done any time the bark will slip. Expert patch-budders count on from 85 to 90 per cent of their buds growing. Either cold storage buds or buds taken directly from the tree may be used. The best buds are found near the base of the previous season's growth. After July 1 or 15 current season buds may be used with success. The work of patch budding is simple and easy; it requires only practice and attention to the essential details to become proficient in the art. The writer favors it in preference to all other methods he is familiar with, though he is not unmindful of some specific adaptations and advantages other methods may have.

Mark Pecan Trees That Have Dieback and Prune Trees Next Fall

Pecan dieback is a fungous disease which is recognized by the presence of minute, black crusts embedded in somewhat elongated cracks or ruptures in the bark of the diseased limbs and dead twigs. Toward the base of the diseased twig the bark often has a water-soaked, waxy appearance, and there is usually a definite margin between the infected and healthy tissue.

Numerous young shoots often start out further back on the branches which have been partly killed, and as the disease spreads these shoots become infected and later die. From these clusters of short branches dieback is often mistaken for rosette. However, in the case of dieback there is no deformity or crumpling of the leaves, which is one of the common symptoms of rosette.

Dieback may be controlled by pruning out the dead wood and burning it, according to specialists of the Florida Experiment Station. The disease is not easily recognized when the trees are in the dormant stage, so it is advisable to go over the trees during the summer and mark all which show any signs of dieback. In this way the grower is able in fall to prune out quickly and thoroughly all the diseased wood.

In pruning for dieback it is necessary to cut back the branches well beyond the visibly diseased areas, for the fungus often penetrates into the wood for some distance beyond its outward appearances. All trees that show a tendency toward rosette should be removed as they will form a harboring place for the dieback fungus.

Charles O. Henninger, Indianapolis, Ind., indorses the opinion of this journal that a practical way of increasing membership in the Northern Nut Growers Association is to make known the profits, present and prospective from nut orcharding. He believes there is data to prove that chestnuts and English walnuts can be grown profitably in sections of the northern part of the United States.

Just mention AMERICAN NUT JOURNAL.

Pecan Varieties for Texas

At the recent annual meeting of the Texas Pecan Growers Association a vision of the perfect pecan through inundation was presented in a highly technical paper read by J. A. Evans of Arlington, who discussed profitable native varieties of pecans for Texas. Mr. Evans recommends Halbert as being one good variety for all territory west of Dallas, and Texas Prolific, Sovereign and Burkett for Texas in general. Other promising varieties are Sirocka, Welty and Simmons, adapted to the western part of the state. These average high in yield and in meat content, also are of good market size. He suggested that the Burkett, as indicated by the present crop, may become one of the most widely adopted pecans for Texas.

Mr. Evans spoke of the successful planting of a pecan from Honduras, which is growing in the yard of Mrs. L. S. Thorne in Dallas, and which, apparently, has the ability to reproduce its kind from seed. He believes the vigor of young trees grown from the seed of this tree may prove an important factor in increasing production by using them as stocks for budding.

Conservation of irrigation water and its development in connection with the pecan industry also is urged in the resolutions.

H. C. Lucas of Brownwood, president, and Oscar S. Gray of Waxahachie, secretary, were re-elected. The following are on the board of directors: Wiley Baxter of San Saba, D. F. Moore of Bend, E. C. Butterfield of Winona, Ike T. Pryor of San Antonio, John P. Lee of San Angelo, A. C. Ellis of Austin and Christian Matheson of Fredericksburg.

With the growth of the pecan industry have developed many insect pests. Fortunately, Texas has a Federal pecan insect station and laboratory at Brownwood. It was through the timely help of citizens of Brownwood and the work of the Lions' Club particularly that this station remained in Texas when it was on the point of being removed to Georgia. Brownwood citizens placed at the disposal of the Federal Government a tract of 200 acres of a partly natural pecan grove, and in addition erected a \$2,000 pecan insect laboratory, which will be equipped for thorough study of harmful insects. It is in charge of A. I. Fabis, a scientist who has the confidence of Texas pecan growers.

Mr. Fabis read an interesting paper on his researches into the life history and ravages of pecan pests, in which he explained up-to-date methods of control.

"The Commercial Future of the Pecan Industry" was the subject of a statistical survey presented by R. E. Yantes of the State Department of Agriculture.

Shipment of inferior Mexican pecans into the United States, which later are sold as Texas pecans, was discussed by B. S. Ramey of the Brownwood City Council. Mr. Ramey urged a lower freight rate on pecans, showing that Brazil nuts are shipped to Los Angeles from South America at one-fourth the rates affecting Texas pecans.

Dr. John E. Cannaday, Charleston, W. Va., writes: "I have found, by actually trying it, that grape cuttings may be top-worked late in the season by the Robert T. Morris paraffin grafting method with apparently 100% 'takes.'"

A Woman's Close Study Of Pecans For The Table

The Great Value of the Nut As Food—Comparison With Other Foods—Excessive Use of Nuts Has Established Reputation for Indigestibility That They Do Not Deserve—Nut Protein Best For Tissue Building—Pecans Can Be Used In Every Course of a Luncheon or Dinner—Some Excellent Recipes.

Mrs. H. G. Lucas, Brownwood, Texas,
Before The Texas Pecan Growers Assn.,
Brownwood, Tex., May 28, 1923

IN preparing this paper I have tried to restrain my very natural enthusiasm for the pecan and am giving only practical and proven facts and am quoting only authorities that are recognized by everyone.

We who really know the pecan think there are no other nuts and few other good things to eat to compare with it in flavor. We like to munch it after or between meals, we add a few of these delicious kernels to a dish to improve its appearance and give an extra zest, we like it in candies, sometimes for special occasions we make pecan pie or cake or bread. But very few use it in as extensive a way as it deserves, we think it is too expensive. Is it? Just what do we mean by expensive? As regards foods we mean cost as compared with the nutrition furnished, don't we? Do you know that according to the U. S. Government statistics a pound of shelled pecans has four times the food value of the edible portion of a pound of meat?

What does this mean to our pocket-book? It means that meat at 30c a pound is more expensive food than shelled pecans at \$1.20 a pound, for when we buy meat we have to pay also for bone, skin, gristle, etc., but there is no waste in shelled pecans.

Before I go any farther, though, I want to say that I am no vegetarian or nut faddist, I am not even suggesting the use of pecans to the exclusion of meats in the diet, though a great many people do thrive on a diet of fruits and nuts. But I do mean to say that when we realize the fact of their food value, we shall then give them their proper place in our menus as one of the most valuable sources of fuel for the running, rebuilding, and rebuilding of the human machine instead of considering them merely as a most delicious and decorative accessory. Often, to provide a welcome change, they can take the place of meat when used as the principle ingredient in such delicious dishes as pecan croquettes,

Nut Sheller Handles Coffee Beans

After having experimented with several packages of coffee beans just as they are received from the plantation before being sorted or cleaned, says the Tea and Coffee Trade Journal, Mrs. Fannie S. Spitz reports that she has had highly satisfactory results with her pinon-nut sheller and separator, removing the hulls and inner covering from the coffee beans with one operation, and delivering the clean beans automatically through a spout, while the refuse drops into another receptacle.

Her pinon-nut plant is at Albuquerque, N. M., where all the coffee experiments were made. Besides the sample she refers to, she had some 40 pounds of Brazil and Colombia coffee just as picked at the plantation, which she put through her nut machine with equal success. The coffee beans were all ready for roasting after being treated in her appliance.

Mrs. Spitz says: "I have made other experiments, but have not been able to do more than satisfy myself that the work with the coffee berry can be accomplished. I am, however, leaving all this for the future purchaser of my industrial interests, for these are for sale. What it will mean to have the coffee being hulled and separated in one operation, dry, leaving all the fine quality of the bean for the consumer to enjoy, may be better estimated by experts."

pecan and cheeseloaf, pecan mousse etc. Or for luncheon or supper, especially in summer time, just add ½ ounce (10 to 16 halves) to your salad and you will have fully as nutritious and certainly as appetizing a meal as if you had had lamb chop instead of the pecans. And just think, your lamb chop would have cost you about 15c, besides the time, energy, and fuel necessary to make it palatable, and your pecans cost less than a nickel! Take the plebeian hamburger steak, the usual size cake, (2½ in. diameter by ¾ in. thick) has the same food value and still costs more than the ½ oz. of pecans. Pecan bread and butter with a glass of iced milk or chocolate provide a simple but nourishing Sunday night supper.

These are but a few of the innumerable



MRS. H. G. LUCAS

ways we can make our meals more varied and so more healthful, appetizing and at the same time less expensive. As a help in so planning meals and to enable us better to comprehend the true food value of the pecan, and at the same time prove its comparative inexpensiveness as a food or as an accessory, let us compare it with some other things. Our basis of computation will be a "standard portion" of 100 calories or food units. It takes only ½ oz. (10 to 16 halves) of pecans to make this, costing at a retail price of \$1 a lb. 3¼c, at \$1.25 a lb. about 4c, at \$1.50 a lb. less than 5c. If you use pecans in any way in a meal then you may omit an entree or some dish for ½ oz. pecans is equal to any of the following:

Oysters 2/3 cup solid, cost about 20c;
Bollied ham, slice 4 ¾, 4½ in. 1.3 oz.
Beefsteak.
Eggs, raw in shell, 1 1/3
Macaroni and cheese, ½ cup.
Thin cream, ¼ cup.
Whole milk, ½ cup.
Cheese cube, 1½ in.
Roast chicken, slice.
Creamed chicken, ¼ cup.
Canned salmon, ½ cup.
Tomatoes, canned, 1¾ cup, cost about 15c.
Corn on cob, 2 ears, 6 in. long.
Potatoes, white, 1 medium.
Lettuce, 2 large heads, cost 30c.
Cantaloupe. 1 melon cost about 10c.
Cherries, stoned, 1 cup.
Grape juice, ½ cup.
Orange, 1 large.
Raisins, ¼ cup.

These amounts can, of course, be only approximate, but Dr. Irving Fisher, of Yale University, who devised this method, and

other authorities on diet and menu planning consider them sufficiently accurate for practical, everyday use.

Of course we who grow pecans do not need to consider the price of pecans we use on our tables, but to the general consuming public the matter of price is an important consideration and for that reason I am trying to make clear the value received. Throughout my paper I speak of shelled pecans only at the retail cost price, partly because of the varying thickness of the shell, but principally to eliminate another frequent objection to the wider use of these nuts,—that they are so difficult and take so long to shell.

But, one may say, pecans along with other nuts are so indigestible! When we take into consideration their high food content as given above we can readily understand how this misconception gained ground. We have been in the habit of eating them between meals or at the end of a heavy dinner when the stomach was already overloaded and the digestive organs already tired out. Vulte and Vanderbilt of Columbia University in their "Food Industries" say, "Excessive use of nuts at improper times has established for them a reputation of indigestibility which they do not deserve." Greer, in "Text book of Cooking" states, "The difficulty experienced by some in digesting nuts is probably due to improper mastication and the indiscriminate use of nuts at such times as the end of a meal or late at night." Sherman, in "Food Products" says, "The fact that consistent fruitarians, both adults and children, maintain a well-nourished condition on diets of fruits and nuts—is strong evidence that the nutrients of the fruits and nuts must be well digested and also efficiently utilized in metabolism. This is in harmony—with the results of modern investigations of the chemical structure of the nut proteins." Jaffa, Professor of Nutrition of the University of California, who a few years ago made thorough and authoritative experiments as to the digestibility of nuts, summarizes as follows: "It may be said that nuts are a very concentrated food, even more so than cheese, but when rationally used they are well assimilated and may form a part of a well-balanced diet. Nuts are a very valuable source of protein and fat, these two nutrients being the characteristic constituents of the more common nuts." Modern authorities agree with these statements.

Dr. Kellogg of Battle Creek Sanitarium, even goes so far as to say, "Nut protein is the best of all sources upon which the body may draw for its supplies of tissue building material. Nut fats are far more digestible than animal fats." Many other food specialists could be cited in the support of Dr. Kellogg's opinion.

Atwater, the recognized authority by both Americans and Europeans, gives the fuel content of a pound of shelled pecans as 3,455 Calories. Compare this,—all the figures are for the edible portion only,—with round steak, 745 Calories to the pound; Porterhouse steak, 1,110 Calories; Leg of mutton, 900; Spring chicken, 505; Trout, 445; Cheese, generally considered the most concentrated food, 2,055; Eggs, 680 a pound. Meat contain 65 to 75% water, pecans only

3.4%. As compared with other nuts, Pecans 3,455 Calories, California walnuts, 3,300; Brazil nuts, 3,265; Butternuts, 3,165; Almonds, 3,030.

Of these food units over 12% is protein. The requirement of protein in the diet is from 10 to 18% so we see that the pecan is a well-balanced ration in itself, as well as nature's most concentrated food. Pecans are therefore an ideal ration to be taken on hiking and camping trips and the like where the bulk and weight of the articles carried is an important consideration. For soldiers on march they would be especially acceptable. Another reason for their being so used is that they are so easily kept.

Nor is this all. Pecans are filled with vitamins, that element which is so essential to our health and which is lacking in so many food substances. They are also one of the most valuable sources of mineral salts, especially Phosphorus, which is the brain building requirement.

Pecans are clean and sweet and free from putrefactive bacteria, from uric acid, urea, carmine etc. which cause so much disease. They are particularly indicated in such diseases as gout for they are practically purin free, and in diabetes, where a diet of low starch and sugar content is necessary.

Pecans can be used every month in the year. This is, I know, contrary to the general belief, but it is a fact if the same care is taken of them as of other food stuffs. We do not attempt to keep any food for more than a few days out of the refrigerator or cold storage in the summer time unless it is canned. I know that pecans will remain sweet and good longer than meat and I venture to say longer than almost any product. Even with our dry staples unusual precautions must be taken and small quantities only purchased to keep the weevils out of the flour and beans and the ants out of the sugar.

Pecans can be used in every course of a luncheon or dinner. First, in the fruit cocktail, ground pecans or pecan halves for topping give a different and distinctive flavor and appearance. Soup, try cream of pecans for a change. For the main dish of dinner, pecans in the turkey, chicken or meat stuffing are a great addition; or for lunch or supper, the pecan croquettes, loafs mousse as mentioned before, pecans in creamed chicken, in chicken salad, in and on fruit salad, pecans in potato salad change this homely dish into one for the most fastidious, cheese balls of either cottage or American cheese, rolled in the ground nuts served with mayonnaise in a lettuce leaf; in fact there is no salad nor dessert that is not better and more attractive by the addition of these delicious nuts. For dessert in which they are the principle ingredient, there are many different pies, caramel, sour cream, molasses; cakes with pecans in the batter or the icing or in both, pecan caramel or chocolate sauce for ice cream and puddings; pecans in blanc manges, gelatine, and whipped cream desserts. Then for the accessories, there are the plain pecans, salted pecans, pecans in innumerable combinations in candy, made with white sugar, brown sugar, maple sugar, in pralines, divinity, fudge, Mexican candy; in or on fondants; glazed (one of the prettiest and best ways.) For sandwiches, pecan bread for sandwich fillings, pecan butter which can be obtained in some markets or is easily made at home by grinding the nuts in a fine chopper; pecans ground or chopped and combined with cheese, dates, raisins,

etc. Rose, in "Feeding the Family" suggests the pecan butter for the lunch-box of the child from 8-12 years old.

There are three of these dishes to which I should like to call your special attention. First, pecan souffles, because they are such a great favorite where ever used, especially among the men, and are so very easily made, being less trouble to make than icing of most cakes, not to speak of the cake itself. Second, pecan and chicken mousse, because it is such a delicious "party dish." Third, pecan croquettes, because they are so good, unusual, and at the same time inexpensive. I give the recipes below.

A hint to the provident house-wife, keep a cup of shelled pecans and one of ground pecans in your refrigerator and you will always be prepared for the hurried meal or the unexpected guest.

More and more people are awakening to the value of pecans and all nuts. I think it would be a splendid idea if parents would mark the birthdays of their children by planting pecan trees, thus providing a constant and permanent food supply and also a safe form of insurance and an endowment for the future education of the children. Aside from the monetary value, a love of nature and of the home would be fostered in the children by transferring the care of the trees and the planting of more to the children as they grew older.

We need not fear overproduction as the consumption of nuts in the last 20 years has grown about 15 times as fast as has the increase in population. This is attributable largely to the growing appreciation of nuts and to the growing knowledge of nut culture, but many authorities attribute it also to the increasing cost of meat and the diminishing supply of the same and the consequent wider use of nuts as "meat substitutes." It really seems a shame to speak of anything so good as pecans as a "substitute," but as Sherman says, "it is natural under the present conditions and reflects the prominence which has been given to meat and the casual way in which nuts have been regarded for

some generations. Looking in evolutionary perspective it might be more logical to speak of meats as "nut substitutes" instead.

As producers of pecans it should be our duty and pleasure to talk pecans, to use them on every occasion and in every way possible and so encourage and show others how to use them until we are able to put over an extensive advertising campaign that is the principle way in which we can help increase the consumption of our product.

RECIPES

Pecan Souffles

2 egg whites.
½ cup sugar.
½ teaspoon vanilla or orange extract.
1 cup pecan meats.

Beat egg whites to stiff froth, then gradually beat in 2/3 of the sugar. Continue beating for 5 minutes, then fold in the rest of sugar, pecans and flavoring. Drop from teaspoon on oiled paper. Bake about ¾ hour in slow oven. Makes about 20 cakes.

Pecan Chicken Mousse

½ cup pecan pieces.
½ cup diced chicken.
1 cup chicken stock.
3 eggs yolks.
1 tbs. gelatine.
1 cup heavy cream.
Salt, cayenne, paprika.

Slowly pour hot chicken stock on slightly beaten egg yolks, add seasonings and cook, stirring constantly until it begins to thicken. Add gelatine, which has soaked 5 minutes in a tablespoon of cold water, chicken and pecans. When the mixture begins to congeal, fold in the well whipped cream and pour into mould.

Pecan Croquettes

½ cup milk.
½ cup water.
2 tbs. cornstarch.
2 tbs. lemon juice.
1 tbs. chopped onion.
1 ts. salt.
1 egg (or 2 yolks).
¼ cup breadcrumbs.
1 cup pecan meats, ground.

Heat the milk and add to it gradually the cornstarch mixed with a little of the cold milk. Let boil up thoroughly while stirring constantly, remove from and add remaining ingredients. Cool, shape, egg and crumb, and fry in deep fat. Makes 10 croquettes.

Central Alabama Pecan Growers in Session

The spring meeting of the Central Alabama Pecan Growers Association was held in Selma, Ala., June 6th and was successful both from the standpoint of attendance and program. About seventy-five growers from all sections of the state were present.

Every phase of pecan culture and marketing was discussed by experts and the questions from the floor indicated the intense interest. In the afternoon trips were made to several of the larger pecan groves where some experiments by the association in co-operation with the state extension force were explained.

The social feature of the meeting was a banquet at the Exkiro Club room that night.

While the Association only has 23 members, all of whom are located within a radius of a few miles, a program was presented which could do justice to a much larger organization. Invitations were sent to pecan growers in all sections of the state to come and enjoy the meeting. It is a source of gratification to the officers that these invitations were accepted by so widely scattered recipients. The result will be an Association which will soon cover the entire state.

One of the most interesting talks was that of W. P. Bullard, of the National Pecan Growers Exchange, Albany, Ga., who spoke on co-operative marketing, the principal

thing the Association was organized for. Other instructive talks were made by C. L. Isbell, state horticulturist on the experiments the association is making on fertilization and spraying; Dr. W. E. Hinds, state entomologist, on insects peculiar to pecans. L. N. Duncan, director extension service; Dan T. Gray, Dean of the College of Agriculture, John Blake, County Agent on vetch in pecan groves for soil building and by several experienced growers, T. W. Sawyer of Citronelle, Ala., and J. A. Kernodle of Camp Hill, Ala.

MORGAN RICHARDS, Secy.

Why Not Nut Trees?

To make Minnesota famous as "the state with the tree-lined highways" is the object which the forestry department of that state has set out to accomplish. The department will plant 30,000 trees along the highways this year and each year hereafter will add to the number. What Minnesota is doing is also being done in Pennsylvania and other states. Experts say if the trees are set back far enough their roots will not injure road pavements. It was contended at one time that tree roots and the shade cast by the branches were detrimental to asphalt paving, but experience in Washington, D. C., and other cities, especially in Florida, Illinois, Massachusetts and California, has proved the falsity of that idea.

American Nut Journal

COVERING NUT CULTURE

NORTH—SOUTH—EAST—WEST

AMERICAN FRUITS PUBLISHING CO., INC.
89 State Street - - Rochester, N. Y.

RALPH T. OLCOTT, Editor and Manager

Official Journal Northern Nut Growers' Assn
Official Journal National Nut Growers' Assn

SUBSCRIPTION RATES

One Year, in advance.....\$2.00
Canada and Abroad..... 2.50
Single Copy20

ADVERTISING RATE

Per column inch.....\$2.80
Forms Close 10th of each month

ROCHESTER, N. Y. JULY 1923

NUT ASSOCIATIONS

California Almond Growers' Exchange—President, G. W. Pierce; manager, T. C. Tucker, 311 California St., San Francisco.

California Walnut Growers' Association—President, C. C. Teague; secretary, W. T. Webber; manager, C. Thorpe, 1745 East Seventh St., Los Angeles, Cal.

Central Alabama Pecan Growers Association—President, C. Kirkpatrick, Selma, Ala.; secy-treas., Morgan Richards, Selma, Ala.

Georgia-Florida Pecan Growers Association—President, A. C. Snedeker, Blackshear, Ga.; vice-pres., H. K. Miller; sec'y-treas., J. S. Wight, Cairo, Ga.

National Pecan Growers Association—Prest., Charles A. Simpson, Monticello, Fla.; vice-pres., J. M. Patterson, Putney, Ga.; and E. C. Butterfield, Winona, Tex.; secy., J. Lloyd Abbot, Spring Hill, Ala.; treas., J. Slater Wight, Cairo, Ga. 1923 meeting, Jacksonville, Fla., Oct. 2-4, 1923.

National Pecan Growers' Exchange—President and manager, William P. Bullard, Albany, Ga.; vice-pres., J. B. Wight; secy-treas., A. D. Galt.

Northern Nut Growers' Association—President, James S. McGlennon, Rochester, N. Y.; vice-pres., J. F. Jones, Lancaster, Pa.; treas., Willard G. Bixby, 32 Grand Ave., Baldwin, N. Y.; secy., Dr. W. C. Deming, 983 Main St., Hartford, Conn. 1923 convention, Washington, D. C., Sept. 26-28.

Oklahoma Pecan Growers Association—President, O. K. Darden, Ardmore; secy-treas., C. E. Ringer.

Southeast Georgia Pecan Association—President, Dr. W. H. Born; vice-pres., Col. G. H. Harris; secy, J. H. Girardeau, McRae, Ga.; treas., E. F. McRae.

Texas Pecan Growers' Association—President, H. G. Lucas, Brownwood; vice-pres., John P. Lee, San Angelo; Secretary, Oscar Gray, Waxahatchie.

Western Nut Growers' Association—President, Ferd Groner, Hillsboro, Ore.; secy-treas., C. E. Schuster, Corvallis, Ore.

A lot of effort will be needed to interest persons in nut culture until the time when bearing nut orchards will do the shouting. When the rush comes, will Nurserymen be ready? Are Nurserymen learning how to propagate nut trees? Do they know of Dr. Morris' wonderful results in grafting? Will they let one or two far-seeing Nurserymen reap results long in advance?

It's all right to advocate planting nut trees along the highways but why not plant nut trees as fruit trees are planted—in orchards? They will bear as soon as winter apple trees will bear. Why not plant nut orchards? Nut growers of the Gulf states did not begin by planting pecan trees along the highways. Highway planting in European countries is because of lack of land to plant in orchard form. There is not that lack yet in this country. Give the nut trees half a chance!

RIGHT OR WRONG?

Are the members of the Northern Nut Growers Association awake to the work immediately before them?

Dr. Robert T. Morris, New York City, one of the members of the Association in good standing has been outlining for the Association in article after article, in public addresses and in his book "Nut Growing," the program for Northern Association conventions for years to come. Are all members of the Association, without exception, ready to talk and ready to work on the lines Dr. Morris has repeatedly indicated?

Here are a few of the declarations which have been indorsed by the Northern Nut Growers Association, because they have not been repudiated by that Association which Dr. Morris represents by his membership therein:

"Any man can raise the mortgage on his farm in this section if he wants to do it. Plant nut trees."

"Ten acres or more of nut trees would be a good investment for the future for those who wish to leave something to their relatives or to those who are not certain about their incomes in the years to come."

"A grove of curly walnut trees would be a good insurance policy."

"There are several kinds of nuts that can be grown here (West Virginia) on good ground, bad ground or cut-over timber lands and they will yield a larger income than almost any other crop."

Nut trees will produce as quickly as apples; they will bring larger and more permanent returns; they require little labor; there need be no hurry about their harvest and the market is not fickle.

"Nuts that might be grown here (Charleston, W. Va.) with profit are superior kinds of black walnuts, Japanese walnuts, curly walnuts, European hazelnuts and chestnuts, all of grafted stock."

Either Dr. Morris is right or he is wrong. If he is wrong why is he allowed, without protest, to preach this alleged salvation for the future? If he is right, why do not the conventions of the Northern Nut Growers Association resound with elaboration of the pointed, practical ways he has outlined and why is there not Association action by formal resolutions indorsing these statements and urging the immediate planting of nut trees suited to sections throughout the twenty states of the Northern belt? Why is there not on record repeated assertion by the Northern Association of the value of commercial nut orchards in the Northern states?

Dr. Morris does not talk of planting here and there a tree or of planting a row of trees along a cow lane or a public highway, or for shade or ornament. He talks of raising farm mortgages through the means of commercial nut orchards. He talks of ten acre groves of nut trees as an investment for those who are not certain about their incomes in the years to come. He says nut trees will bear as quickly as apples, will bring larger and more permanent returns, require little labor; the harvest may be at

the owner's convenience; the market for the crop is not fickle! Why plant apples under these circumstances?

No program for the Washington convention is needed. Let the secretary or the president as soon as the members convene, read from Dr. Morris' writings and discuss and plan and act. If there is further time, let this program be repeated and repeated and extend the period of the convention to four or five days in order to get somewhat into the subject. It's too big for a handful of enthusiasts; let the cry go out for help. Give the matter publicity and get the needed aid to accomplish results. Let every member plant nut trees and preach nut orchard planting.

HAVE YOU A HAND NUT CRACKER?

Undoubtedly a wider use of hand nut crackers of modern design would cause greater consumption of nuts. Pecan crackers are available in clever designs; also nut bowl crackers. By the way, why not make the bowls out of nut tree wood? Who has a hand nut cracker that will satisfactorily crack black walnuts and butternuts. Who has a barrel of black walnuts or butternuts right now? Are you serving nuts at your table with enough hand crackers to go around? We have two nut cracker bowls full of nuts on our sideboard the year around. As in the case of beer and light wine in European countries these nuts are so conveniently accessible we do not have to overeat spasmodically at a particular season of the year!

MAKING PECAN GROVES PAY

An important article is that by J. C. Britton, an experienced pecan grower, of Albany, Ga., in this issue. In spite of ordinarily good care of pecan groves, bearing results are disappointing in many cases. Anything that can be done to remedy this condition is of the greatest importance, not only to the owners of the groves in question but also to the welfare of the pecan industry generally. It is upon the experience of grove owners that the planting of more groves largely depends. Unsatisfactory results in any line of endeavor tend to affect adversely interest in that line.

Mr. Britton's practical experience over many years in the heart of the Southeastern pecan belt is presented for the benefit of others who, we are sure, will be grateful to him for his information and suggestions. It is noted, for instance, that in many instances the better trees in a grove are getting better and the poorer trees are getting poorer. Unevenness is thus increasing year by year. Simple measures are proposed to correct conditions. We shall welcome expression of opinion on this subject, as developed by Mr. Britton's article.

The Northern Nut Growers Association for years has sent out a list of accredited Nurserymen whose stock of improved varieties of nut trees it endorses for planting, thus being on record for some time as favoring the planting of nut trees of improved varieties.

Likewise the American Nut Journal for years has advocated the planting of the improved varieties of nut trees as supplied by accredited Nurserymen.

If it relates to nut culture it should be in the AMERICAN NUT JOURNAL. Please send it in.

NUT GROWING IN THE NORTHERN STATES

Willard G. Bixby, prominent member and formerly an officer of the Northern Nut Growers Association, is one of the best informed nut specialists in the country. He has coupled close study of the subject of nut culture with practical experimental work, his experiment grounds on Long Island, N. Y., containing specimens of nut trees of nearly all kinds. He has traveled extensively in search of varieties and in following up reports of valuable discoveries by personal inspection. Mr. Bixby, while urging caution in planting because of much that is yet to be learned regarding nut culture, advocates special attention to the black walnut. He is interested in the proposition by H. R. Mosnat, of Chicago, to develop orchards of the Lewis, Morris and Glory walnuts, but suggests that every promise regarding the quality of these nuts may not be entirely fulfilled, because of disappointment in results in the cases of other promising black walnuts.

Mr. Bixby has found that it is most difficult to get an idea of the true value of a black walnut for various purposes by testing one year's crop. His experience with the Alley and the Ten Eyck black walnuts are cases in point. He believes there is a definite reason for these variations and that when this is known they can be guarded against or entirely eliminated. His trees are not quite old enough for the tests in this regard which he plans to make. Thus far the Thomas black walnut has given fine promise and Mr. Bixby suggests that this variety be included with the others named, in plantings.

Mr. Mosnat's specialty is the black walnut. He welcomes suggestions and greatly appreciates advice. He is a persistent advocate of the propagated tree as against the seedling. He is far-seeing and believes in action now for the purpose of attaining practical results in the shortest time. He says:

In my Lewis nut we have a wholly new type and new blood in the black walnut line, and I am informed that this tree has been well known for the excellence of its nuts for very many years and it has borne for some fifty years, although much neglected and growing on the poorest kind of poor soil.

The Morris black walnut has also borne for many years, about as long, and has been just a little care and it grows on good soil here in this state. The owner appreciates good trees and has long preferred this one walnut tree to all others.

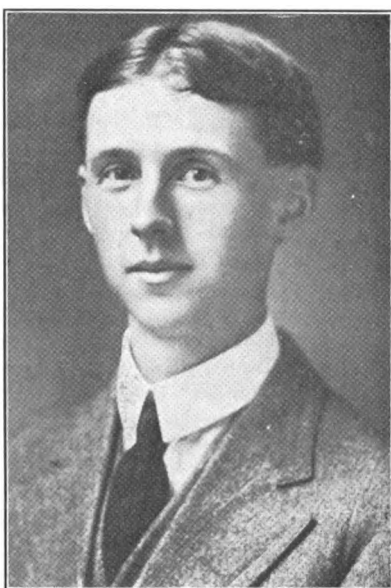
This matter of variations should not discourage us too much. Dr. Morris says we should read Basil King's book, "The Conquest of Fear," and follow what it teaches. I do not believe in rushing in where angels fear to tread, but unless we take some reasonable risk in this world, we are apt to be run over by the other fellow who does. Here in Chicago, if an auto driver does not proceed rapidly enough, he gets into trouble for obstructing the traffic, and we who are trying to advance the cause of hardy nuts in the East and Central West should not make a similar mistake.

Some queer things happen in horticulture. For instance, I knew of a man who had a seedless pear tree—one season—and refused quite a good offer from a Nursery for scion rights, and the next year that tree had seedy pear again. This is a rather extreme case, of course, but it shows that such varieties are by no means confined to nut trees or black walnuts, and in spite of them, there is a large and important industry in growing pears profitably for market. The blight is much worse than fruit variations, and a man in Kansas claims that he has a hardy, practically blight immune pear of good quality.

If we do find better black walnuts, groves of the best we have now can be top-worked

to the better, newer sorts. I am going to plant 1000 trees just as soon as I can produce them.

In the opinion of leading nut growers the subject of nut culture in the Northern states is now at the commercial stage. The Journal has argued for the planting of nut orchards with the best available Nursery-grown trees; and with the statement constantly made that such planting must of necessity be more or less experimental; that is to say, that in the case of nut orchards Nurserymen and nut growers cannot promise results with the assurance that can be promised in the case of the longer tried fruit varieties. By planting of nut orchards and more planting of nut orchards and by trying again and again in various sections under orchard conditions with Nursery stock procured from different places, the way will be pointed out for successful nut



H. R. MOSNAT, Chicago, Ill.

culture on a commercial basis. Someone has got to lose in this effort while others gain. It is pioneer work. It is probably the only way to arrive at both general and special results. It is the way the commercial nut orchards now in existence in this country were brought about.

An isolated tree or a bunch of trees here and there for testing purposes might in time develop the facts, but an orchard planted out for commercial purposes will lead, by reason of the money invested and the necessity for real action in its development, overcoming obstacles as obstacles in any other business proposition are overcome (not as in the case of a side issue) is the logical way to get results. A tree here and

there or even two or three rows of trees planted out for testing purposes involves little or no risk; the proposition is looked at at best only on a 50-50 basis (it may succeed and it may not); nothing is lost except a little time if it amounts to nothing; the tree or rows of trees will be given such attention as time of the owner permits, etc.

We do not believe we shall get anywhere in a short time unless we go beyond those conditions and start right out to sink or swim. Someone is likely to get big results. The United States Department of Agriculture is not of this opinion, at least in regard to all nuts except the black walnut in the northern states. The Department does advocate planting of the black walnut, and it is the black walnut that Mr. Mosnat is talking about. He would argue that he is simply following out the suggestions of the United States Department of Agriculture—planting black walnut; and that instead of planting the first black walnut that is available he proposes to plant black walnut trees the nuts of which have elicited praise from several sources.

The point we would suggest is that operations on this scale be entirely within reason in view of the experimental feature of the proposition and that while we would urge planting of nut orchards, at the same time we would discourage operations in this line on anything like a colossal scale.

We suggest that enthusiasm be allowed to run without check so long as it applies to a testing out of varieties of walnuts on a scale which would mean no great loss to any individual or association of individuals, but on a scale large enough to give a real test under practical orchard conditions with enough at stake to insure practical results if any are available. Let us plant nut orchards as commercial fruit orchards have been planted—not on an immense scale, until assurance has been secured to warrant large development.

G. F. Gravatt, of the U. S. Bureau of Plant Industry, can show members of the Northern Association four acres of bearing chestnut trees near Washington. C. A. Reed has co-operated with others in producing this result.

Someone should present at the Washington convention a list of the nut orchards thus far established in the Northern states, their location, owners and present status.

Growers of pecans in Carter county, Oklahoma, can make more money on the average than the cotton grower, declared O. M. Putnam, county agent.

Just mention AMERICAN NUT JOURNAL.

ALL INTERESTS CO-OPERATING

ATENTION to the mutual interests in the Nut Industry is succinctly directed by Manager T. C. Tucker of the California Almond Growers Exchange: "We are a strictly co-operative organization, including Grower, Broker, Wholesaler and Retailer."

This may be said also of organized effort in the production and distribution of Walnuts and Pecans, each of which is represented in Associations.

It is because of this co-operative feature that the American Nut Journal combines the news of the Nut Industry in the fields of Production and Distribution. Its Market and Crop Reports will be of increasing value.

It is of prime importance that the market shall be supplied; a supply is the basis upon which a market exists.

It is also of prime importance that a market be created and maintained; distribution of the product is what makes the industry.

The Journal desires to co-operate heartily with producer and distributor, and to that end welcomes frequent communications by way of comment on current events, personal mention, trade news and suggestions. It is the logical medium for interchange of trade comment and the recording of trade activities.

Fourteenth Annual Convention of Northern Nut Growers

Will Be Held In Washington, D. C., September 26-28—Full Particulars Later—Secretary Deming Preparing the Program—List of Some Who May Take Part—Experimental Orchard of Willard G. Bixby a Feature For Members En Route—National Pecan Growers Association to Meet In Jacksonville October 2-4.

The fourteenth annual convention of the Northern Nut Growers Association will be held in Washington, D. C., September 26-28, 1923. The sessions will probably be in the National Museum as in the case of the last Washington convention. If a headquarters hotel is selected announcement will be made.

Secretary W. C. Deming is preparing a program. He will welcome suggestions by members and by any of our readers.

Dr. Robert T. Morris is prompt with announcement that he will present a paper entitled "Notes on Grafting by the Paraffin Method." The interest in this subject is great, as is evidenced by much correspondence in this office in regard to it. An article on the subject appeared in the June issue of the Journal.

It may be that addresses will be made by:

Dr. J. W. Corrigan, Easton, Md., on "The Nut Situation East of Chesapeake Bay."

C. E. Jones, Corrybrook, Va., on "Nut Tree Culture in Virginia."

Dr. Fred E. Brooks, French Creek, W. Va., on "Nut Insects."

J. W. Killen, Felton, Del., on Twenty-five Years In Experimental Nut Growing In Delaware."

William S. Linton, Saginaw, Mich., on "Possibilities for Nut Culture in Michigan."

Harry R. Weber, Cincinnati, O., on "Progress of Nut Culture in Ohio."

H. A. Gossard, Wooster, Ohio, on "Experimental Work on Nuts for Northern Planting."

Willard G. Bixby, Baldwin, N. Y., on "Results in My Experimental Orchard on Long Island and Another Year's Progress in Northern Nut Culture Generally."

H. R. Mosnat, Chicago, on "The Lewis, Morris and Glory Black Walnuts and Plans for Commercial Nut Culture in the Northern States."

George N. Lamb, Sec'y. American Walnut Mfrs. Assn., Chicago on "The Black Walnut for Timber."

C. A. Reed, Pomologist, Washington, D. C., on "Nut Culture Investigations by the U. S. Dept. of Agriculture," with some notes on his recent trip to the Orient.

D. A. Hulseman, Lakeside, Wash., on "Profit in English Walnut Culture in the Pacific Northwest."

President McGlennon's Annual address, an exhibit of nuts, moving pictures of nut orchard scenes, practical discussions, tips about Washington and plans for the immediate future for Association activity, election of officers, selection of the next place of meeting, etc., will keep the members busy throughout the convention.

It is suggested that going or coming the members should take advantage of the opportunity to visit the remarkable experimental nut orchard of Mr. Bixby at Baldwin N. Y., some account of which will be given at the convention.

Those who can do so should plan to go on from Washington to Jacksonville Fla., where on October 2-4 (the week following the Washington convention) the National Pecan Growers Association will hold its annual convention. Commercial nut orchards of the Southern Georgia district,

miles and miles of them can be seen en route. These orchards are well worth a stop-over visit, as showing what can be done with improved varieties of nut trees in this country. The Georgia nut growers are shipping nuts by the carload in season. The crop runs into a million dollars.

What the Nut Industry Can Do

Editor American Nut Journal:

Upon the outside cover page of the June issue of the American Nut Journal, I see a half-tone of A. Clarke Snedeker, Black-shear, Georgia, the newly elected president of the Georgia-Florida Pecan Growers Association, and I think it would be of interest to readers of the Journal to know a little more about Mr. Snedeker than I believe they generally do.

A few years ago, Mr. Snedeker was in the publishing business in Philadelphia, and was unfortunate enough to be stricken with a sickness from which he was over a year in recovering, and in the meantime, his business suffered severely. He had to sell it out and all his interests in Philadelphia, for the reason that he was told by his physician that he must live an outdoor life if he valued his health. He was over 50 years of age and had spent practically all his business life in the publishing business and knew little of any other. He spent several months in trying to decide what to do and traveled over quite a portion of the United States. He finally located in Black-shear, Georgia, and purchased his place and after this was done, had comparatively

little money left. Under these conditions, he had to begin life anew as it were.

He made up his mind that pecan growing was going to be important and started a Nursery, the first one in that section of Georgia. He produced the trees, sold them and set them, planting pecan groves for himself and his neighbors, and now they are bearing. One tract of 15 acres, 9 years planted, produced 3600 lbs. in 1920, and Mr. Snedeker has gone from a position where the future was one of anxiety, to where he is in comfortable circumstances.

What Mr. Snedeker has done shows what a man of intelligence can do when he takes up a good proposition such as pecan growing in Georgia is, when properly looked after.

WILLARD G. BIXBY,
Baldwin, New York, June 28, 1923.

The Brazil Nut Situation

Speaking of Brazil nuts, Jas. W. McGlone said yesterday: "Cable advices from our correspondents in Brazil received today report the market there considerably higher, last sales being made at materially above prices ruling here. The crop is practically over and such small lots as may be expected during July will be insufficient to supply the balance required by England, which up to the present time has purchased less than 8,000 tons, as against her minimum requirements of from 9,000 to 10,000 tons. Supplies in this country are estimated to be altogether inadequate to supply the requirements during the fall.

If it relates to nut culture it should be in the AMERICAN NUT JOURNAL. Please send it in.

Nuts Can Be Grown With Big Profit in West Virginia Says Expert

Trees Will Bring Larger Returns Than Apples and Will Produce Quicker, Dr. Morris of New York, Tells Garden Club; Guest of Charleston Physicians

From the Charleston, W. Va., Press

Any man can raise the mortgage on his farm in this section of the country if he wants to do it. There is no use paying out interest here year after year.

That is what Dr. Robert T. Morris, prominent horticulturist of New York, told an audience at the Y. W. C. A. where he lectured under the auspices of the Garden club.

Dr. Morris' subject was "Nut Growing," on which he is an authority and about which he has written a book. He accompanied the lecture with stereopticon slides.

There are several kinds of nuts that can be grown here on good ground, bad ground, or cut-over timber lands and they will yield a larger income than almost any other crop, Dr. Morris said. They will produce as quickly as apples; they will bring larger and more permanent returns; they require little labor; there need be no hurry about their harvest and the market is not fickle. Nuts that might be grown here with profit are superior kinds of black walnuts, Japanese walnuts, curly walnuts, European hazelnuts and chestnuts, all of grafted stock, he said.

Investment for Future

Ten acres or more of nut trees would be a good investment for the future for those who wish to leave something to their relatives or to those who are not certain about

their incomes in the years to come, he said. He cited the case of a friend in Illinois who obtained from one crop \$8 a bushel, with 14 bushels to the tree and 15 trees to the acre.

A man in the audience spoke up and said that he had done the same thing here without grafting the trees. He said he knew of a curly walnut tree in Boone county that was sold for \$4,700 to be used for veneer purposes.

Dr. Morris used the sale of this tree as an illustration of the returns that would be brought if one would plant a grove of curly brought if one would plant a grove of curly walnut trees now. It would be a good insurance policy, he said.

Trees Can Be Grafted

Grafting of nut trees in cut-over lands is more profitable than growing timber, the speaker said.

Dr. Morris, who experiments with nut trees on his 430-acre country place at Stamford, Conn., came to West Virginia to attend the convention of the West Virginia Medical association at Beckley. This morning he conducted a clinic for local physicians at the Charleston General hospital.

Last evening Dr. Morris was the guest of honor at a dinner given at the Edgewood country club by Dr. J. E. Cannaday. Thirty-eight physicians were guests.

The Round Table

Report on the Lewis and Morris

J. F. Jones, Lancaster, Pa., nut expert, and C. A. Reed, Washington, D. C., pomologist in charge of nut investigations, U. S. Bureau of Plant Industry, this month tested the Lewis and Morris black walnuts. Mr. Jones reports:

The Lewis nut is of medium size, very smooth shell; nut very heavy; cracking quality no better than that of ordinary black walnut; kernel rather small for size of nut; appears to have J. californica blood. I have received several samples the past fall and winter that I would pronounce better nuts and believe better varieties can be procured in the East for propagation.

The Morris black walnut is small to medium, fairly smooth and of good appearance, shell thin and brittle. This is a much better nut than the Lewis in my estimation and is well worthy of propagation if it bears well. Cracked under pressure after the shell is softened the kernel could be gotten out in fine shape. This applies to any good cracker.

Testing nuts and making notes from only one specimen is not very satisfactory, especially when such nuts are rancid. I hope to have several of these nuts this fall.

Canadian Nut Culture

Early this year the Ontario (Canada) Horticultural Association in annual convention in Toronto, passed the following resolution for submission to the federal minister of agriculture:

In view of the increasing interest in the culture of nut trees as food producing and ornamental trees and of the great increase in the volume and value of nuts imported into Canada for domestic consumption, we would suggest that a competent man be appointed to investigate the nut producing possibilities of Canada with a view to determining the most suitable species for the various sections of our country and encouraging the wider planting of the best hardy native and exotic species.

We have not heard that action on the subject has been taken. Prof. J. A. Neilson, Guelph, Ontario, it would seem, is the logical man for the proposed position. He has specialized in nut investigations in the Dominion.

Farmers bulletin 700 of the U. S. Department of Agriculture, by C. A. Reed, describes pecan culture with special reference to propagation and varieties; illustrated.

H. R. Mosnat, Chicago is on the trail of more new black walnuts. His search extends over the entire country.

"New stunts in Harvesting Soys" is the subject of an article in the July 14th issue of the Country Gentleman.

Monticello Nursery Co. Monticello, Florida

One of the oldest nurseries in the Gulf States. Winners of the prize for the best quality pecan in the world, in "The Best Pecan Contest" held at Bend, Texas, in 1921.

All of our pecan trees are budded and grafted with wood cut from bearing orchard trees. Quality and service of the best.

Trifoliata seedlings and all standard varieties of pecan trees.

Write for Catalogue and Prices.

MONTICELLO NURSERY CO.
F A MAHAN, Mgr.

AN UNUSUAL OPPORTUNITY
To Purchase
ENGLISH WALNUT GROVE
In bearing. About 14 acres. Located in northwestern Pa.
EDWARD A. SELKIRE, Buffalo, N. Y.

Papaw Poisoning

Editor American Nut Journal:

Dr. Deming, as per page 87 of the December Journal can add another tree fruit—if he has not already done so—to the causes of "dermatitis venanata," for I have two grown children who are poisoned badly by handling the papaw fruit. It is much worse than poison ivy and the lead acetate wash that cures ivy poisoning has no effect on papaw poison. I think permanganate of potash does, sometimes. One daughter will be seriously poisoned if she stays in the room where a papaw is ripening. Yet medical schools do not admit any poisoning properties in the papaw and very few doctors know of it—only two or three in the city of Springfield, Ill.

BENJ. BUCKMAN.

Pasturing in Nut Orchard

O. S. Reimold, Yonkers, N. Y., has a farm near Holland, Mich., eight miles east of Lake Michigan, 30 acres of which is pasture land through which a creek runs. The soil is mostly rich land or sand and clay loam. In answer to his inquiry as to planting black walnuts on this land and using the space between trees for pasture, Secretary Deming of the Northern Nut Growers Association says:

"I should have no hesitation in setting part, at least, of this pasture to improved black walnut trees, provided you can give them a little attention and protect them from the cattle. There is only one way to do this and that is to set four post around each tree, to support rails or wire, far enough from them so that the cattle cannot browse on them. I don't think they are very fond of black walnut but they will amuse themselves with the foliage. You cannot grow cattle and young nut trees together in any other way, that I know of."

The Dundee, Oregon, Walnut Growers' Co-operative Association of Dundee, Yamhill county, has filed articles of incorporation with the state corporation department. The incorporators are R. A. Olmsted, F. W. Meyer, E. S. Geer, W. H. Bentley, Henry Holzmeyer and Alfred Allan. The association has no capital stock but prescribes a membership fee of \$2.

The Elgin, Texas pecan crop promises to exceed the owners' expectations.

Albany Pecan Nut Exchange, Albany, Georgia

Now booking orders all varieties paper shell pecans S. A. P. Mail us list of your requirements to-day, for fall delivery.

For Sale: Pecan Farm

Four miles from town of Dublin, Ga. 164 acres, highly improved. Has 12-acre pecan grove; trees 2 and 3 years old. All land suitable for pecans and peaches. \$75 per acre. In pecan section.

A. H. NELSON, Dublin, Georgia

FOR SALE -

96 acre tract, 50 acres planted to black walnut 30 ft. distance, 3 to 7 years old, just right for top-working, balance good walnut land. Good 7-room stone house and outbuildings, no barn. 35 miles north of Philadelphia in the beautiful Perkiomen Valley. Price \$6800, terms.

RYAN, SPRING MOUNT, PA.

If it relates to nut culture it should be in the AMERICAN NUT JOURNAL. Please send it in.

Budding Notes From Texas

(Continued from page 5)

taken is the new cross of the Burkett and Delmas pecans which is being developed by Mr. Burkett. As this is written, July 14th, the new shoots on this tree have a length of four and one-half feet and are still growing. Some 250 buds of this new variety have been put on seedling trees at San Saba and Bend, about eighty per cent of which have put out and are doing nicely. If this variety is as good as either of the parents, this work will be worth while, and, as one observer remarked: "If the nuts are as big in proportion as the wood growth, they will be the size of coconuts."

Incidentally, pecan enthusiasts who condemn the chip bud method, or else "damn with faint praise," may find something interesting in a recent experience of R. F. Lyendecker, of Lockhart, Texas, whose father was one of the old-timers in Texas pecan propagation.

Early last spring, before the sap began to rise in the timber, Mr. Lyendecker put on some 600 chip buds on young seedling trees near Lockhart, and at the time of the annual convention of the Texas Pecan Growers Association in May 95% of these buds were putting out. In view of reports often heard that only about fifteen or twenty per cent of chip buds can be made to live, there is food for thought in this experience. Mr. Lyendecker's father is believed to be the first man who got results from grafting a pecan on a hickory tree—that was nearly fifty years ago.

And just to show how the best of them sometimes fall down, it has recently been learned that in one instance out of several hundred grafts put on Nursery stock, at a time when soil and climate conditions could not have been more favorable, apparently, only a trifle more than 20% lived. In the same Nursery last year, and under conditions that did not seem to be so favorable, about 95% of the grafts set and made fine growth.

Possibly some of the high-brow pecan sharps can explain "how come."

X.

The Eaton Nut Company, St. Louis, Mo., says its cracker will not operate successfully on black walnuts on account of the hard division wall in the nut. The company is working to overcome this fault.

If it relates to nut culture it should be in the AMERICAN NUT JOURNAL. Please send it in.

An important French house will agree to grant exclusive purchase rights to an American house well situated for the sale of walnuts of all kinds in the United States.

MAURICE JACOVIA

52 Rue des Petits-Ecuries, Paris, France

Manual of WALNUT GRAFTING

The Biederman Method is fully described and illustrated. It is applicable to pecan, hickory and chestnut. Of special value in topworking, because it does away with use of ladders.

Price 75c per copy postpaid.

W. N. Y. PUBLISHING CO.,
BOX 124
Rochester, N. Y.

NUT GROWING IN BRITISH COLUMBIA

In a recent letter to Secretary Deming, Northern Nut Grower's Association David Gellatly, Gellatly, B. C., says:

"I am enclosing a copy of my price-list, and at an early date intend sending you samples of the various nuts which I have grown successfully here; for your opinion on same, as I find upon comparison with specimens received from various points both in the U. S. and Canada, that I have some fine strains of both walnuts and filberts.

"Being a nut enthusiast, and keenly interested in the extension of nut culture in British Columbia, I should like to have a quantity of subscription literature to send those to whom I sold nut trees this spring; or, I could give you a list of these names, so that copies of the *American Nut Journal* could be mailed to them from your office.

I shall indeed be pleased to receive any suggestions dealing with the subject of nut culture, whereby interest can be aroused in nut growing, as I am convinced that this industry has a great future before it in the Okanagan Valley of British Columbia. Am doing my best to awaken public interest by writing short articles for the local press, and should be very pleased to have the "outlines of talks on various phases of nut growing" as offered in your letter in the *American Nut Journal* for April; and which I am sure would be of great value in writing articles, etc., in future.

DAVID GELLATLY."

Gellatly, B. C.

To this Secretary Deming has made reply.

Dear Mr. Gellatly: I am very much interested in your letter and the catalogue that you have sent me. This is the first information that I have had about you and your work. I am glad to know you are giving your attention to the field of Nursery nut trees, for which there seems to be such a great opportunity in your locality.

I regret that I do not see on your list any grafted, budded or otherwise asexually propagated trees. This association has always made a strong point of recommending grafted, or otherwise asexually propagated trees for uniform and sure results, such as are necessary in commercial growing, and only recommends seedling trees for the experimental production of new varieties, or when grafted trees cannot be obtained.

Taking up your list in detail, the Ridenhower almond can be propagated by budding as easily as the peach tree. It may come fairly true from seed but never with the certainty of the budded tree. You do not state that your trees are seedlings, but I take it that you would state that the trees were budded if they were so. I think it should also be stated that this is a hard shelled almond. I realize that it has been the immemorial custom of Nurserymen to mention only the merits of their productions

and to keep silence about what might be considered demerits. But it is time that immemorial custom was changed, and the nut Nurserymen ought to get the credit of doing it.

Filberts are so easily propagated from layers that the variable seedlings need not be used. Your statement that "as seedlings they pollinate each other is admission of their variability. But I am not sure how far such variability can be trusted to bring about interpollination. I had rather plant varieties that I knew would interpollinate than to trust to the chances that seedlings would do so.

I think it is a mistake to label seedling walnuts as "acclimated." Hardiness is one of the variables of seedlings. Of course a hardy tree may produce more hardy descendants than a tender tree, but they will still be variable.

I do not think we should ever use the expression "comes true from seed" about any nut. We all know that this cannot be strictly true. Some nut trees vary less in their seedlings than others. Some come fairly true to type. Nothing comes perfectly true from seed. So all the characteristics that you mention in regard to Broe's seedling English walnut are liable to variation and to such an extent that they could not be disinterestedly recommended for commercial planting. Nor for any other kind of planting where an assured variety is wanted. The seedling stage of commercial planting of the English walnut is long past. Experience has proved the grafted tree and disproved the seedling.

I wonder if you have fruited the seedlings of "Sharpe's Hybrid" Japanese walnut, for I take it that it is the seedling that you are offering under this title. In the East we have had some curious results when our Japanese seedling trees have begun to bear. This remark applies also to the cordiformis and sieboldiana. I should be interested to see what kind of a nut these seedlings bear. Here in the East a large proportion of them bear a nut like our butternut, *Juglans cinerea*, attributed to the prepotency of butternut pollen from nearby butternut trees on the parent trees. Have you butternut trees in your country? If you do not have butternut trees, and your seedling Japanese walnuts never bear nuts like a butternut, then I think it would settle the question as to the influence of the pollen of butternuts in causing seedling Japanese trees in the East to bear butternut-like nuts.

The statement that *J. sieboldiana* grows nearly ten times as fast as the English walnut will bear considerable modification. My English walnuts often grow from three to five feet in a season. Imagine a siebold walnut growing from thirty to fifty feet in a season!

As you have no native chestnut trees, and therefore no chestnut blight, you should be able to grow the chestnut successfully and with great profit.

Your statement that, "all nut trees will bear at as early an age as fruit trees and often much earlier," seems to me too sweeping. I think you could say conservatively that "nearly all grafted (or asexually propagated) nut trees will bear at as early an age as most fruit trees and sometimes earlier." Seedling nut trees are apt to be extremely uncertain and variable in their characteristics.

You caution against dealers who sell southern varieties of nut trees, meaning, of

course, to northern customers, knowing that their trees are unsuited to such climate. I heartily agree that all misleading statements, as well as all misleading omissions, by Nurserymen in regard to their products, acts in the end to their own detriment, as well as to that of their customers.

A customer of your, Mr. Kelsey, of Clinton, was in my office two days ago and spoke in praise of your cordiformis nut. I shall be very glad to get samples of your different nuts and, if there are enough of them, to submit them to others for judgment as to their merits, Dr. Morris, Mr. Bixby and Mr. Jones.

Under another cover I will send you samples of our literature. I will see what I can do in the way of "outlines of talks."

The Roycrofters at East Aurora, N. Y., are featuring maple syrup and maple pecan patties. The latter are similar to the pecan pralines which have long been manufactured in New Orleans. It is suggested that the Roycrofters and others could undoubtedly use the kernels of other nuts—the black walnut, for instance—in the manufacture of maple nut patties. The Roycrofters would do well to plant black walnut trees and produce the nuts themselves. Can Nurserymen supply the propagated trees for this purpose—and of what varieties?

The state forester of Indiana announces that the 70,000 miles of highways of that state are to be set to black walnut and hickory trees. H. R. Mosnat, Chicago, has written him advising that budded or grafted trees be planted rather than seedlings. Can Nurserymen supply these, or must the state grow them? There is room for 700 black walnut trees along the farm lines and highway lines of Mr. Mosnat's mother's 300-acre farm in Iowa. That is a good starter.

A high-class grocery in Chicago, the "Stop-and-shop" on Michigan avenue, features black walnut specialties one day a week. One week it is black walnut slices as a pastry special. Another week, for instance, it is black walnut tarts, a kind of cup cake that combines the taste delights of macaroon and black walnut. In New York city there is a string of stores, operated by Charles Cash, handling nuts as an exclusive line. From these stores are sent boxes of nut kernels of any kind or assortment to any place, any time. Lots are sent upon order every week, every two weeks, every month, or for birthday and other anniversaries, or to steamships sailing to or from New York. Others in some of the cities feature nuts along with other health foods. Much more of this could well be done.

Nut Exhibit at New York State Fair—For the first time in some years an exhibit of New York state grown nuts has been arranged for the state fair. Several years ago preparation was made for such exhibit but there were no entries. But this year it is hoped that a large number of entries will be received and that the exhibit will be one illustrative of the increasing importance of the nut producing industry. A first prize of \$15 for the best and largest exhibit of New York state grown nuts is provided, with second and third prizes of \$10 and \$5 respectively.

An important article on nut culture in Canada by J. A. Neilson, Guelph, Ontario, Canada, appears in the seventeenth annual report of the Horticultural Societies of the province.

Just mention AMERICAN NUT JOURNAL.



Squirrel Nutcracker

BEST ON EARTH

Cracks the shell but not the kernel. Very simple; operates faster and better than any hand power nutcracker known.

Alex Woldert Co.,
TYLER, TEX.

Suggestions For Northern Planting

Recently H. M. Wallace, Detroit, Mich., asked for information which we believe is of special interest to many of our readers. At our request, Secretary Deming, of the Northern Nut Growers' Association, made reply to the questions which Mr. Wallace asked, and which follow:

Do you consider grafted and budded nut trees perfectly hardy for the vicinity of Detroit, Michigan, and possibly fifty or one hundred miles north of Detroit?

What in your judgment would be the yield in pounds per tree of Pecans, English Walnuts and Black Walnuts at the end of any period of years, assuming that all varieties were planted at the same time and that the trees when planted were of the same age and grown under equally favorable conditions?

What is the comparative growth in feet at the end of any given number of years, such as five, eight, ten or fifteen years, assuming that same were all planted at the same time and that trees of the same age were used and that conditions were equally favorable for their development?

This information is particularly valuable when customers contemplate the setting of nut trees as shade trees along drives, and find themselves at a loss to know which variety to choose, and not having information before them on their comparative rapidity of growth.

Which varieties of grafted or budded nut trees, black walnuts, English walnuts or pecans, would you consider most practical when planting same for a commercial orchard in this climate?

SECRETARY DEMING'S REPLY

In regard to the hardiness of grafted and budded nut trees at Detroit and possibly fifty or one hundred miles north, an unqualified answer cannot be given. If you wish to know about hardiness alone I can say that most of the northern varieties of nut trees will be hardy, as far as our knowledge goes. The Northern pecans have been shown to be hardy in wood, but none are yet known to have borne nuts so far north. English walnuts are hardy all through the fruit belts on both sides of the Great Lakes. Many trees are bearing fair crops in Canada, but not yet on a commercial scale. One would not be justified in recommending the planting of either of these nuts for commercial purposes at Detroit.

On the other hand the black walnut can be recommended for commercial

planting and the variety that has given the best results is the Thomas.

At Rochester, the filbert is giving commercial results, and I believe that they would do equally well with you.

If the chestnut is not a native at Detroit, and so likely to carry the dangerous chestnut blight to commercial plantations, it would probably be one of the best nuts that you could plant. There is great promise with the chestnut outside the range of the native nut. The varieties grown by Mr. Riehl are undoubtedly the best ones.

The shagbark and hybrid hickories would do well also, but the grafted trees are in limited supply and are generally of slow growth and bearing. The best results have been obtained by topworking the native hickories to improved varieties. If you have native hickory trees these can be profitably topworked.

For ornamental purpose and rapid growth the Japanese walnuts are unsurpassed, but there is some doubt about the hardiness of the grafted varieties.

As for yields, no figures can be given, for there are none. Nobody knows. I'm sorry. This is a question that we should all like to have answered.

As for relative rapidity of growth of nut trees, Prof. A. K. Crittendon, professor of forestry in the Michigan College of Forestry, gives the following figures:

"If small trees, about ten feet high, are used for planting they should reach the following sizes in twenty years on favorable soil: Chestnut, 12 inches; black walnut, 8 inches."

These are all the figures for nut trees that he gives. There are no others available.

In our report for 1921 there is a lot about planting trees, nut trees, in Michigan. At that time the Hon. William S. Linton, of Saginaw, was our president. He and Senator Penney put through the legislature a bill for the roadside planting of nut trees on the highways of Michigan. Dr. J. H. Kellogg, of Battle Creek, is also interested in nut growing in Michigan. C. A. Reed, the nut culturist of the Department of Agriculture at Washing-

ton, is a native of Michigan and familiar with the conditions, more so than I am. I suggest that you get in touch with these gentlemen.

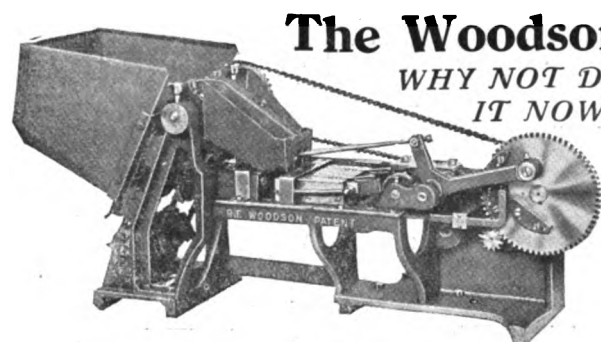
Nut culture in your part of the country has not yet been developed on a commercial scale. The advertisements of some Nurserymen would lead you to believe the contrary, perhaps. There has been considerable planting, but it has been of an experimental nature.

To sum up: For those who wish to plant nut trees along drives, for a hardy, medium sized tree, that, however, in your climate may grow rather slowly, the black walnut, the Thomas variety for the best commercial nut, the Stabler for the handsomest foliage and a valuable nut for home use. For a medium sized, fairly rapid growing tree with valuable nut, the Riehl varieties of the chestnut, where the native chestnut is not present. For a rapid growing tree with luxurious foliage, also attaining medium size, but with some question about the hardiness in the grafted kinds, the Japanese heartnut. For close planting and a height not over fifteen feet, as for hedges and borders, the European filbert in varieties, such as those offered by McGlennon Nurseries, of Rochester. For topworking the native hickories, the Kirtland, Taylor and other hickories, and the Laney and other hybrid hickories. These usually make a rapid growth.

The English walnuts in favored localities where extra good care can be given are well worth trying. The French varieties, Franquette and Mayette, are probably the best we know.

W. C. Deming, Hartford, Conn.

T. W. Rodhouse, Jr., Pleasant Hill, Ill., is a close reader of the Journal. He is so enthused by what Dr. Morris says from month to month that he believes he will cut down everything on his farm except nut trees and evergreens. He will save the latter for windbreaks. He used to eat lots of hog meat and beef and get sick. Now he eats nuts mainly and is in good health. He hopes that the Northern Nut Growers Association will meet at Godfrey, Ill., to see what E. A. Riehl has done in commercial nut orcharding. Mr. Rodhouse says he would start three days ahead of convention date and work up association membership all through that territory. He is studying up on nut culture so as to give lectures.



The Woodson Shelling and Grading Machinery

WHY NOT DO IT NOW?

Place your order for WOODSON Shelling and Grading Machinery, that you may not be disappointed on delivery when wanted.

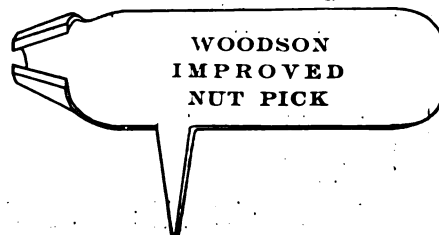
In equipping your plant with WOODSON Machinery you are not experimenting but will have what over 90% of the commercial shellers and dealers in the United States are using.

I have several types of second-hand machines taken in

on trades which I offer at attractive prices. If you have any of other makes which you would like to turn in as part payment on WOODSON'S let us hear from you. *Catalog on Application.*

BEWARE OF INFRINGERS, AS SEVERAL MAKES ON THE MARKET ARE.

ROBERT E. WOODSON, Sole Inventor and Manufacturer
3763 FOREST PARK AVE., ST. LOUIS, MISSOURI



WOODSON
IMPROVED
NUT PICK

The American Nut Trade: Market and Crop Reports

PERSIAN WALNUT

Big Walnut Trees in California

Redlands, Cal., July 7—A controversy as to the location of the largest walnut tree in San Bernardino county is attracting much attention.

The first tree "discovered" was on the M. M. Randall place in Highland. It measures nine feet and one inch in circumference. But as soon as it was broadcast that this was the champion tree, up came M. L. Frank of the Mission district near Redlands with a giant tree measuring twelve feet and five inches in circumference. The tree was probably planted by Spanish men long before the white settlers came.

And next came R. F. Cote, who admitted that the Faink tree was fair, just fair, but nothing to get excited about. For on the Curtis homestead, not so far away is a walnut tree 13 feet in circumference. And his story of the tree is of real interest, for it tells of the pioneer days in the valley.

"All these trees in the Mission district were probably planted about the same time," he says. "One of them is already famous, for it has grown around the brake rod from the old wagon that brought the Curtis family across the plains in the early 50s. The rod was placed in the fork of the tree when it was just a youngster, now the wood has grown around the rod so that it is almost covered."

Mr. Cole says two trees on the Curtis ranch are about 13 feet in circumference eight inches about the ground. The trees are about 60 feet high and have a spread of about 85 feet. They have limbs that are more than nine feet in circumference. Not far away is a row of 13 walnut trees planted in 1870, and these trees average more than ten feet in circumference. Nearby is growing what is believed to be the largest loquat tree in the country. It is six feet in circumference and 39 feet high. It is estimated there are 1,200 pounds of fruit on the tree."

The services of the California Walnut Growers Association, which not only include the selling expense, but the inspection expense, field department expense, advertising expense, the legislative and all other industry expense average between five and five and one-half per cent, or slightly over one cent per pound. Certainly it cannot be truthfully said that this charge is excessive, especially as by far the largest item is advertising which really cannot be considered as an expense, but more in the form of a permanent investment or insurance for the future success of the industry.—C. Thorpe, Mgr. Cal. Walnut Growers Assn.

There are today in our office some substantial samples of foreign walnuts which are offered duty paid New York at six cents per pound. These walnuts look fairly good, crack between 80 and 90 per cent good. Through constant and intelligent advertising; through the development and maintenance of a uniformly satisfactory grade, the Association persistently obtains from

three to four times this price for the walnuts produced by its members. And where is the man who can say that without the organization the California walnut grower would not be competing on a price basis with these ridiculously low foreign quotations? Anyone desiring to see the samples here referred to will be gladly granted the privilege upon request.—C. Thorpe, Mgr. Cal. Walnut Growers Assn.

His Seedling Nuts Inferior

Russell Canby of Winfield, Iowa, secretary of the Winfield Fair association, has become enthusiastic over the possibility of raising English walnuts in this part of the state. A few years ago he planted a few of the regular walnuts and last year picked a few mature nuts. Being seedlings the nuts were very inferior so he began investigating the business of getting perfect nuts.

He has found that grafted tops on native black walnut roots will do the business, and has ordered several trees which he set out this spring.

BLACK WALNUT

Another Good Black Walnut

Glenn Allen, farmer, Middleville, Mich., has a black walnut tree which for half a century has been supplying nuts for his family. It has commercial importance, according to specialists who have examined the tree and its nuts. The meats crack out of the shells in halves and sometimes in whole. They are rich and well flavored. Last spring Supt. H. D. Hootman of the Graham experiment station cut a number of buds and scions from the tree and has grafted them in seedlings at the Grand Rapids station where they will be observed under scientific culture. It is estimated that the big tree is 125 years old.

According to the Marlon Falcon, Wayman Bros., Bradfordsville log dealers, recently offered Dr. A. J. A. Alexander, Woodford county, \$500 for a single walnut tree on his farm which is said to be the largest walnut tree in America. The tree measures more than five feet in diameter at the stump. All efforts to purchase this and many other fine walnuts on the Alexander farm were unavailing.

Dean C. A. McCue, Univ. of Delaware Experiment Station, says that some ten years ago the station force made a search of the state for exceptional black walnut trees and located one or two that are probably above the average in the vicinity of Selbyville; but the station has not been able to do anything with them. Perhaps Dr. Morris' grafting method would help out in this case.

Those who are interested in the Lewis black walnut described by H. R. Mosnat in a recent issue of the Journal can procure a reprint of the article by sending ten cents to the office of the Journal.

Mrs. W. P. Miller, Barnesville, Ga., for 17 years has been planting nuts and budding the seedlings watching with special interest the development of the trees. She is illustrating the fact that nut culture can very well be taken up by women. She is an advocate of the planting of pecan trees as memorial trees.

Just mention AMERICAN NUT JOURNAL.

THE ALMOND

California Almonds Unexcelled

The California almond ranks with the best of the foreign grown almonds for confectionery purposes, according to the results of a recent investigation of salted almonds by an agency and backed by the United States Department of Agriculture.

The tests attempted to find a difference in flavor or texture between the Mediterranean and California almonds, and by the experiences of a large Eastern candy company who accepted the invitation of the invitation of the investigators to experiment on the subject. Although the candy company stated prior to their experiment that they could use only Spanish grown almonds they were frank to admit after their test that they were unable to determine any differences.

Government experts went so far as to advise the agency making the investigation to recommend to their clients that they enter into competition with the foreign grown almonds, variety for variety. This is good news to more than 3,000 California almond growers, who will have to enter the shelled almond markets of America sooner or later to dispose of the rapidly increasing almond production of the state.—N. Y. Commercial Bulletin.

African Almonds Gain In Quality

As a result of a recent decision on the part of Moroccan exporters to sort out the bitter almonds it is now possible to secure Moroccan almonds in five distinct grades, the highest of which contain less than 2 per cent of the bitter variety. Previous to the war almonds from this source had fallen into disrepute in all markets because of the inaccurate statements made regarding the percentage of bitter almonds in shipments.

Speculators Buying 1923 Almonds—The Minute Book, published by the California Almond Growers Exchange, issues the following: "Speculators are taking orders in Eastern markets for 1923 almonds. They haven't bought any almonds yet. Where are they going to get them? What do they mean by selling something they haven't got? You know what they mean. Don't let them get away with it."

E. E. Dunkell, manager of the New York branch of the California Almond Growers, is in receipt of information from headquarters at San Francisco to the effect that the board of directors of the exchange at a recent meeting gave instructions to materially enlarge their shelling equipment, with a view of marketing Blue Diamond brand of shelled almonds in 1923 as extensively as the market will permit. No orders are being solicited at this time.

The work of Prof. R. H. Taylor with the California Almond Growers Exchange in what has been known as the production department is to be continued under the name of the field department. His headquarters have been moved from San Francisco to Sacramento where the Exchange has the only exclusive almond shelling plant in the world.

The assets of the California Almond Growers' Exchange in a report just issued are fixed at \$1,300,000, with a total of 3000 members. The sale of the 1922 crop to date has reached the \$2,024,025 mark.

County Agt. E. E. Tucker, Rockville, Conn., believes there is opportunity to produce tree crops to a great extent. He says that on the farm of R. A. Sikes, of Ellington, hickory nuts sell readily to motorists passing on the state road. One young tree bore 1½ bushels of nuts last year; the nuts were nearly as large as English walnuts and sold at the rate of \$6 per bushel.

WORLD FAMOUS VROOMAN FRANQUETTE ENGLISH WALNUT TREES
on four year California Black root. Trees six to eight feet high, in dozen lots, \$1.75 each; in hundred lots, \$1.60 each. Write for prices on other grades, sizes and quantities.

Barcelona, Du Chilly, Daviana, Geantes Des Halles and other varieties of filberts at from 50c to \$1.00 each. Order while my stock remains intact.

Address: **RICHARD H. TURK, Washougal, Washington**

THE PECAN

A Modest Citizen Speaks

A. W. Woodruff, San Saba, Tex., says: "Being modest citizens we do not claim much for pecans in San Saba county. All we really do claim is that our county is the Pecan Center of the Universe.

"So we have just begun to grow pecans in San Saba county. Ten years from now, when the annual meeting of the West Texas Chamber of Commerce is held in San Saba, we'll show you folks about 100,000 acres of pecan orchards producing big, thin shelled pecans about the size of hen's eggs—possibly a trifle smaller.

"And we have a message for Texas citizens—especially West Texas citizens. It is:

"Wake up and get acquainted with your state tree. It holds more potential wealth than all other crops that can be grown in Texas, and it is one of the most beautiful trees in the wide world.

"When your town talks about planting shade trees, remember this. When you talk or think about adding to the enduring wealth of Texas, think of pecans. For it can be grown most anywhere in Texas—if only man isn't too lazy to do his part—which mostly he has been to date.

"Cover those great plains with pecan trees. They will grow there, and you can produce other money crops in your pecan orchard—if you'll only use a little common sense about it.

"Make our state tree a reality instead of something merely to talk about. Get the idea that what Texas needs, is a million acres of pecan orchards—the cultivated kind—and then another million.

"When they get to bearing it will bring two or three hundred million dollars into Texas each year for our pecan crop.

"And pecans make up the only crop on earth that will make your land worth \$1,000 an acre—worth it because they will pay big interest on that valuation—and your orchard will sell for that price or even two or three times that price.

"These statements are not pipedreams—they are facts. You, each of you, can help to make these and greater things come up and believe in your state and really get acquainted with your state tree. You are largely strangers now."

Insect Control In Texas

Writing late in May to D. F. Eaton, Bal-linger, Tex., Prof. S. W. Bilsing, dept of entomology, Texas A. & M. College, said:

"The control method for the pecan leaf case-bearer is much easier than for the nut case-bearer. I have made a very careful inspection of the nut case-bearer over some of Central Texas and have reports from several other places stating that there are very few pecan nut case-bearers this year. In fact, I do not believe there will be enough to do any damage and as far as the pecan nut case-bearer goes I should not advise you to go to too much trouble to try to control it this season.

"The pecan leaf case-bearer on the other hand seems to be very abundant this year in West Texas and from the number of specimens I have gotten and the reports I get back it must be very common. It does not attack the nut like the nut case-bearer does but feeds on the foliage, therefore its damage is not nearly so great as that of nut case-bearer and is more easily controlled. It can be controlled by spraying

with 1½ to 2 pounds of arsenate of lead per fifty gallons of water.

"If I can help you on the pecan nut case-bearer I will be glad to do so."

Research Work in Georgia

Definite plans have been arranged and work started on a co-operative experimental project with pecans between the Central Alabama Pecan Growers Association, which has headquarters at Selma, and the Alabama experiment station, according to Professor C. L. Isbell, head of the department of horticulture at Auburn, Ala.

As announced by Prof. Isbell, a five-year contract has been signed by this association and the experiment station for the purpose of carrying on practical research work, which will be sufficient to warrant the drawing of safe conclusions. This is regarded by Prof. Isbell and Prof. Dan T. Gray, director of the experiment station, as the best co-operative arrangement ever made with Alabama farmers for the study of agricultural problems.

Under the agreement, research work will be conducted in a portion of the pecan groves of ten members of this association. A study of fertilizers, cover crops, and cultivation will be made. The pecan growers will furnish the fertilizer, seed and conduct the work under the direction of a representative of the experiment station. Pecan trees varying in age from one to fifteen years will be concluded in the experiments.

Prominent in arranging the experiment was Clifton Kirkpatrick, president of the Central Alabama Pecan Growers Association, and Morgan Richards, secretary. In addition to his work with the pecan growers, Mr. Kirkpatrick is preparing to broaden his horticultural activities in view of his becoming president of the Alabama horticultural society upon the death of J. H. McCary, president.

County Agent John Blake, who is a very enthusiastic pecan booster, will also take an active part in conducting this work.

Big Future For Pecans In Georgia

Macon, Ga., July 8—Great as the peach industry is in Georgia, Ralph B. Small, president of the A. B. Small Company of this city, predicts that in a few years the pecan industry will be greater.

New pecan groves are springing up all over Georgia and the yield of nuts this year will run into the millions of pounds.

Mr. Small attended the Georgia-Florida Pecan Growers' Association convention at Waycross. He visited groves in Southern Georgia and in Florida and talked with growers from both states. He himself, owns groves of 1,800 acres near Oglethorpe in Mason county, Georgia.

"It wasn't so long ago that I put my entire crop of pecans in pockets," said Mr. Small. "Although not all of my trees have reached the age to be bearing, I gathered 10,000 pounds last year and in a short time I'll be gathering from a half million to a million pounds a year."

The U. S. government and the states of Florida and Georgia are beginning to realize the importance of the pecan industry. The government has experts in the field to overcome insects and fungus trouble whenever it appears. The state of Florida alone has appropriated \$15,000 this year for that work.

Pecan trees are long lived as a rule. It was brought out at the convention that trees have grown to such size that a single tree produced from 1,000 to 1,500 pounds of nuts a year.

Pecan Diseases Yield to Bordeaux Mixture Spray

Gainesville, Fla., July 2—A remedy for most of its evils lies in spraying the pecan tree with Bordeaux mixture during summer, especially during the early months of the season. At least this is indicated by the results of years of investigational work and of practical experience.

While there are other contributing agencies for the control or prevention of diseases of the pecan, the most important thing to do to this end in summer is to give a few sprayings with 4-4-50 Bordeaux mixture, covering the leaves, twigs and young fruit completely.

According to specialists of the Florida Experiment Station this mixture is beneficial in curtailing—if not eliminating altogether—the losses from such diseases as scab, anthracnose, mildew, and brown leaf spot.

It is recommended that in fall and winter all leaves and nut shucks be picked up and burned or plowed deeply into the soil, in order that as many as possible of the spores of these diseases be destroyed. The pruning out of all dead wood from the trees in winter or spring is also recommended since the spores harbor in decaying matter.

However, even with the destruction of all leaves, nut shucks and dead wood, there may be some trouble from some of the diseases, and it is recommended that at least one spraying be made in May and June, and if diseases appear, more sprayings will have to be made.

Also if rains during the summer are frequent, it may be necessary to make several applications of the Bordeaux mixture, since frequent rains will wash it off. One pound of resin fish oil soap to each 50 gallons of the spray mixture adds to the spreading and sticking qualities of the spray.

At Comanche, Texas

Comanche, Tex., July 5—Pecan growing on a scale that will make it of commercial importance is one of the industries now developing about Comanche. Charley Denny has planted 100 acres of pecans on his farm eight miles north of Comanche and T. J. Williams, general manager of Higginbotham Bros. & Co., has planted 120 acres on his farm three miles northeast of town. These are now in their second year. J. B. Fielder is another citizen of this section giving some attention to pecan growing, with 200 acres of pecan plantings now in their second year.

Walter Durham has planted 80 acres on his farm four miles northeast of town, now in their first year. Ernest Denny has twenty acres, also now of the yearling stage.

The seed planted here are of the Halbert variety, the growers believing the western variety would do better here. Recently Charley Denny has done grafting on about 1800 of the plants on the Williams farm and also on several hundred of those of Fielder and Ernest Denny.

Quite a number of other farmers and landowners about Comanche, are becoming interested in pecan culture, and probably several hundred acres more will be planted next year.

Pecans planted now will be bearing light crops in about three years, but are expected to take eight or ten years for them to develop to real commercial propositions. In the meantime, the owners will go ahead raising field crops along with their pecan trees, with no considerable loss of acreage.

PERSIAN WALNUT

What a Persian Walnut Tree Will Do

Among the many inquiries concerning walnut culture which annually come to the writer's attention, perhaps the one most frequently asked is: "What are the future prospects for the walnut industry in California?" Without wishing to appear in a class with the prophets, says L. D. Bachelor in Diamond Brand News, the writer believes that some reliable information regarding the future development of the industry may be gained by reviewing the experiences of the past. This is especially true concerning several phases of this question which most frequently come to the minds of inquiries, such as the trend of annual walnut consumption in the United States; the average price of walnuts to the producer; the annual walnut production of California; the length of life of walnut trees; the age of profitable bearing, and the average production of a good walnut grove. The several sides to this question may be answered as follows:

The annual consumption of walnuts in the United States has ranged between 60,000,000 and 70,000,000 pounds annually during the past five years. The consumption has increased more than 30 per cent since 1909. Nuts, which were formerly looked upon as a holiday luxury, are becoming more and more a year-around food in the average household.

A gradual increase in the prices paid to the California grower has been accompanied by an increase in importation of walnuts exceeding our own average production. It may thus be inferred that the business of walnut culture in California is not likely to suffer from the results of overproduction in the near future.

Length of life of walnut trees. The limit of the profitable length of life of walnut grove cannot be told from experiences in California. Provided the soil, climatic and water conditions are well suited to this crop, the trees may continue to thrive and produce satisfactory crops for a long period, which is difficult to limit. Some observers have expressed opinions that walnut groves, under favorable conditions, may continue to be a satisfactory source of revenue until the trees are from 50 to 200 years old. Some of the oldest walnuts groves in Ventura county are the most profitable and productive in the state. Notable examples of such old, yet productive groves, are the J. C. Daly grove of 20 acres planted in 1881; 18 acres of the J. M. Sharp grove planted in 1887; and the T. A. Kelsey grove of 26 acres planted in 1888. The last mentioned grove has only 12 trees to the acre, planted 60 feet apart each way, and is considered by many to be one of the best walnut properties in the state of California. The trees at their present age of 34 years, show no apparent deterioration. This grove has produced an average annual tonnage of 191 pounds of nuts per acre during the past four years. Groves in which the trees are planted 60 feet each way may be expected to grow longer without deterioration than groves where the trees are planted closer and thus severely compete with each other.

Profitable bearing of young trees. The young walnut grove may be expected to bear profitable crops by the time the trees are 6 to 10 years old, depending upon the variety, the number of trees planted per acre, and the natural conditions surrounding the grove.

A grove of the Placencia variety in Orange county, of almost 50 acres, produced an average of 44 pounds of ungraded nuts per tree in its ninth year. As the trees are 60 feet apart this represents 528 pounds per acre. During the first 10 or 12 years this might well have been double planted and thus produced approximately 1056 pounds per acre the ninth year.

In 1918 a block of 60 trees of the Chase variety on a heavy clay loam soil in the Puente district, produced a profitable crop of 35 pounds per tree the sixth year.

The average annual production per acre varies somewhat from year to year, but if all the bearing groves in the state are considered, the average yield will fall between 800 and 900 pounds, usually nearest the former figure. It is often hard to obtain

accurate figures concerning the production of particular areas, as the desire to tell a good story often times seems to influence the statistics; furthermore, the average yield of a grove is the only safe guide to use, whereas it is the occasional or extraordinary one which is most often the subject of conversation.

Average annual yield of walnuts in the bearing groves of California...825 lbs.
Average annual yield of walnuts safe for business estimates in proven walnut growing sections...1000 lbs.
Average annual yield of walnuts which competent men frequently obtain1200 lbs.
Average annual yield of walnuts which is possible but extraordinary2000 lbs.

THE PECAN

Thomasville, Ga., pecan growers report indications of a good crop, the best in several years.

June prospects were for a fine crop of pecans in San Saba county, Texas.

C. Forkert, Ocean Springs, Miss., reports a wet spring season favorable to pecan scab; mercury 86 to 90. There is a fair setting of pecans.

County agents, A. & M. College experts and Dept. of Agriculture representatives are teaching Texans how to bud pecan trees.

The pecan crop in the Lometa, Texas district will be equal to, if not larger than the bumper crop of last year, according to the latest estimates made by pecan growers.

The Barnwell Pecan Orchards Co., in the Albany, Ga., district proposes to sell 2500 of its 4500 shares of preferred stock. W. A. Coleman is president; Joseph L. Nettles secretary.

Hammond, La., July 5—John and Joseph Anderson, successful strawberry growers and local business men are demonstrating that pecan culture in this section is one of the dependable crops to be considered in the future. On their farm nearly one hundred trees are thriving, the majority of which are yielding nicely. The crop is a great revenue producer, markets always active and quick money is made.

In Moments of Relaxation

Our esteemed citizen, G. A. Walters, city attorney, who used to have his habitat in San Saba, is at his best when in moments of relaxation he gets to telling about San Saba's big pecans and the profusion of growth that this delectable nut shows in what Attorney Walters claims is the place of its birth.

This claim is born out, says Attorney Walters, by the fact that several years ago workmen who were digging a well near San Saba town came upon a perfect specimen of a petrified pecan some forty feet below the surface of the ground, in a shaly formation beneath a bed of stratified limestone. Geologists say it took several million years to build the formations that were found above this specimen of Juglans Hicoria, and therefore our informant states that as no other county, district or part of the earth, and the waters under the earth, has come to the front with a claim of older evidence, it follows that the first pecan must have been hatched in San Saba county.—Mexia, Tex., News.

Dr. John E. Cannaday, Charleston, W. Va., reports that the purple walnut graft-wood sent to him by Dr. W. C. Deming has turned out very well indeed. One of the grafts he put in has made a growth of 20 inches.

Edible Coconut Co., Wilmington, Del.—The growing of cocoanuts and other nuts and sale of same; cap., \$400,000.

Just mention AMERICAN NUT JOURNAL

THE ALMOND

That the large almond acreage now coming into bearing makes it unwise to plant almonds at this time, except in areas particularly and peculiarly adapted for their culture, is the statement of R. H. Taylor, head of the production department of the California Almond Growers' Exchange, who was in Oroville yesterday, says the Oroville, Cal., Register. The foothill area about Oroville, because of its freedom from frost and more reasonably priced land, Mr. Taylor declares to be one of the sections which meets the requirements for new planting.

Chestnut culture offers great commercial possibilities here. The one thing that must be guarded against is the importation into California of the chestnut blight.

Pecan culture is not as promising in California as chestnut growing. While pecans thrive in California, the lower labor costs of the Southern States make competition with those states difficult.

The formation of the California Almond Growers' Exchange has given to almond growers in California today nearly fifty cents out of every dollar that the consumer spends for California almonds, as against approximately twenty-five cents out of every consumers' dollar received by the grower in 1910.

Problems of the Industry.

The problem of the California almond industry, Mr. Taylor declares, is to increase production and to grow better varieties.

Production, he declares, can be increased from a present average of 700 pounds to the acre to an average ranging between 1200 and 2000 pounds. This could be accomplished by adequate fertilization and better irrigation methods.

Growers in the Durham and Chico districts in this county, Mr. Taylor contends, have been prone to overmudge. The result has been that the flowers have been coated with oil and bees have not had proper opportunity to work upon them. In the opinion of Mr. Taylor, better results would come from an expenditure of some of the money spent in smudging in fighting the red spider and in building up the strength of the tree so that its leaf life would extend over a longer annual period.

Experts of the United States and State Department of Agriculture are being interested in the development of superior varieties of almonds, thus increasing the quality advantage that California now has over European competitors.

When the tariff on shelled almonds was increased from four cents a pound to fourteen cents a pound in the tariff bill, which became effective last September, opponents of the tariff contended that the increase of ten cents a pound would be passed on to the consumer. Instead of that the price to the consumer has remained unchanged, foreign importers and exporters absorbing the tariff charge.

The disappearance of the chestnut industry in the East, owing to the devastation of the chestnut blight, offers California an opportunity to build up a chestnut industry, in the opinion of Mr. Taylor. The only foreign competition that chestnuts here would meet is a very small importation from China. In planting chestnuts, however, care should be exercised to see that they are planted in regions to which they are particularly adapted. The Oroville District is a demonstrated district, as far as chestnut production is concerned, and planting could well be encouraged here.

Southern Pecan Growers Exchange is Formed

PRODUCERS of pecans in the Albany, Ga., district met in Albany July 4th and formed the Southern Pecan Growers Exchange, a non-profit, co-operative marketing association, on the Sapiro plan. The endeavor will be to eliminate waste and speculation in handling this great food crop; standardize grades, prevent dumping of the crop on the market at the period of lowest prices by the substitution of orderly marketing, and stimulate the consumption of pecans and pecan products throughout the country and abroad by advertising, demonstration and other methods that will be worked out by the permanent organization. It is the expectation of the new organization that it will ultimately become the sole marketing agency of the big majority of the papershell pecans grown in the South.

R. B. Small, of Macon, was elected temporary chairman of the new organization.

A membership committee was elected, consisting of: B. W. Stone, Thomasville; H. H. Simmons, Jacksonville, Fla.; R. B. Small, Macon, and H. U. Jackson, Baconton.

An organization committee was appointed, consisting of Messrs. Small, Stone, Simmons and Jackson, and J. M. Patterson, of Putney; Alex M. Wynn, of Leesburg; H. K. Miller, of Monticello, Fla.; J. S. McGlennon, of Rochester, N. Y.; J. R. Drake, of Putney; C. S. Parker, of Thomasville, and H. A. Peacock, of Albany.

H. K. Miller is vice-president of the Georgia-Florida Pecan Growers Association; a prominent pecan nurseryman and nut grower at Monticello, Fla.

J. S. McGlennon is president of the Northern Nut Growers Association, and owns a large pecan grove in the Albany district.

J. M. Patterson is president of the Paper Shell Pecan Growers Association at Putney; a prominent pecan grower and nurseryman; retiring president of the Georgia-Florida Pecan Association, and owner of extensive pecan groves.

B. W. Stone is a former president of the

Georgia-Florida Pecan Growers Association; a prominent nurseryman and pecan grower; was actively interested in the formation of the Georgia Pecan Growers Cooperative Association, being county chairman for Thomas county.

R. B. Small is one of the largest pecan growers in the state, his holding at Oglethorpe being around 2,500 acres in pecan groves. He, too, is a former president of the Georgia-Florida Pecan Growers Association.

C. S. Parker is owner of the Parker Pecan Groves at Thomasville, and is a leader in the industry.

Alex M. Wynn is owner of the Ramsey grove near Leesburg.

Harry U. Jackson owns extensive and productive groves near Baconton and represents the owners of other large acreages.

H. A. Peacock is Mayor of Albany and owns groves in this section.

WILL HANDLE THIS YEAR'S CROP

It was decided to go ahead with plans for permanent organization to be ready to handle this year's crop of pecans. It was stated that the acreage controlled by the men in the meeting would produce more than 1,000,000 pounds of nuts this year. The Paper Shell Growers Association, of which Mr. Patterson is president, will market this year about 750,000 pounds of pecans. This association will continue to market its nuts independently, as in the past, but will work in strict harmony with the Southern Pecan Growers Exchange as regards grades, standards, etc., and will not compete with the new exchange in the matter of marketing.

AMERICAN NUT JOURNAL, the Official Journal, three years for \$5.00; twelve months, \$2.00; single copy 20c.

BISSELL
A few simple changes makes a double disc



With trees to right, soil is pulled away and with trees to left, soil is thrown back. Returning on same track leaves soil level as with a Double Action Harrow.—Disconnect right section and attach behind left and you have a regular Double Action Harrow—A Real Dual-Purpose.

The Handy Control is equally efficient with disc in either form. There is a BISSELL for every tillage need. Manufactured only by

T. E. Bissell Co. Ltd. Elora, Ont. Canada

PECANS

A limited quantity of choice, large paper shell pecans of the finest varieties, for sale at INTRODUCTORY PRICES. Delivered by insured parcel post in five-pound boxes. Write for prices and mention quantity wanted. L. F. CULVER, Grower, Iowa, Miss.

Predicts Big Pecan Crop

The pecan crop in West Texas will be a large one this year, according to H. A. Halbert, of Coleman, an authority on pecans. Mr. Halbert in a recent statement said:

"Conditions have been ideal throughout Texas for one of the largest pecan crops in history. The nuts are now 'set' and safe. Nothing but hail storms can destroy the immense crop on the trees. In the event of hail or other storms the effect will only be local and will not materially lessen the general yield.

"The worst enemy to the pecan crop is a worm known as the case-bearer. But the almost total failure of the pecan crop last year had two compensations from which we will derive benefit this year. One was, the rest it gave the trees and the opportunity to grow the buds for this year's crop. The other was, starving the case-bearers for the want of nuts to feed on.

"Still a fair supply of these pests are in existence this spring, but not in sufficient numbers to materially diminish so large a crop. In fact, they will benefit paper-shells by thinning them. However, there will be great danger for another year, for there will be so many of these case-bearers by July when they retire from depredating on this year's crop of nuts, as well as a great many other insect enemies of the pecan that they will destroy the naturally small to medium crop of nuts for the next year as they did in 1922."

Shade Trees of the Future

According to nut-growing enthusiasts, nut trees will replace most shade trees in the near future. Nut breeding is said to be 150 years behind that of apples and other fruits, but it is fast catching up; some day we may have a larger black walnut with a paper shell. Among the varieties recommended for orchards are black walnuts, hickory nuts, hazel nuts, pecans and those sorts of chestnuts which are resistant to blight.—Rochester Times-Union.

AMERICAN NUT JOURNAL, the Official Journal, three years for \$5.00; twelve months, \$2.00; single copy 20c.

A NEW BOOK! NUT GROWING

By Robert T. Morris

The latest and only up to date book on the newest and one of the most important branches of Horticulture, giving a broad survey of a rapidly growing industry. Detailed explanation of successful methods of propagation and the new process of grafting with the use of paraffin; illustrated.

An invaluable work for all nut growers.

Price, \$2.65, Postpaid

AMERICAN FRUITS PUB'G. COMPANY
39 State Street, Rochester, N. Y.

MEMBERSHIP DRIVE

National Pecan Growers Association
The National Pecan Growers Association fee for membership is \$2.00 per year, with a student membership fee of \$1.00.

The subscription price for the American Nut Journal, official organ, is \$2.00 per year.

Note combination offer below.

REGULAR YEARLY RATES

Association Membership.....\$2.00
American Nut Journal..... 2.00

SPECIAL YEARLY RATES

Association Membership } \$3.25
American Nut Journal }

Address J. Lloyd Abbot, Sec'y.
Route 1, Spring Hill, Ala.

The Logical Market Place for Sale of Nuts

The Advertising Columns of the American Nut Journal Chief Exponent of the Trade.

Hundreds of Readers of this Journal Ask for Pecan Nuts in Moderate Quantity at Prices Less Than the Retail Price per Pound in Northern Markets. They Would Be Eager Buyers if They Knew Where to Apply. If There is Any Surplus at Any Time, the Advertising Columns of this

Journal Will Dispose of It. Rate, \$2.80 per Inch. Announcement Should be Maintained the Year Around (Yearly Rate, less than 60 Cents per Inch a Week) to Secure Best Results. Make Your Name a Household Word Wherever Pecans Are Wanted. Make It Easy To Procure Them.

AMERICAN NUT JOURNAL

P. O. Box 124

ROCHESTER, N. Y.

American Fruits Company's Library Opportunities

PRACTICAL BOOKS ON HORTICULTURE, NUT GROWING, NURSERY PRACTICE

Any of the following books will be sent on receipt of price by AMERICAN FRUITS PUB'G CO.,
123-125 Ellwanger & Barry Bldg., ROCHESTER, N. Y. Prices subject to change.

American Apple Orchard By F. A. Waugh.....	\$1.90	Irrigation for the Orchard—Stewart.....	1.75	Plant Propagation; Greenhouse and Nursery Practice—M. G. Kains... ..	2.40
American Fruit Cultivist By John J. Thomas.....	3.65	Land Drainage—Joseph H. Jeffrey... ..	2.15	Plant Physiology—B. M. Duggar....	3.00
American Fruit Farm—F. N. Thorpe.....	2.65	Landscape Gardening—Downing's Famous Work—10th Edition— Revised by Waugh.....	6.00	Pomology, Text-book of—Gourley... ..	2.75
American Grape Culture—Munson... ..	2.65	Landscape Gardening—House and Garden's Book of Gardens, 9 1/2 x 12 1/2, 400 Illustrations.....	5.15	Practical Forestry—A. S. Fuller....	2.15
American Grape Growing and Wine Making—George Husmann.....	2.15	Landscape Gardening Kemp—Re- vised by F. A. Waugh.....	2.15	Practical Fruit Grower—Maynard... ..	1.00
American Horticultural Manual By Budd-Hansen, two vols....	3.30	Landscape Gardening—Maynard....	2.65	Practical Tree Repair—Peets.....	2.65
American Peach Orchard—Waugh... ..	1.90	Landscape Gardening—The Small Place—By Elsa Rehmann.....	3.65	Principles of Agriculture—Bailey... ..	2.00
Bulbs and Tuberous-Rooted Plants... ..	2.15	Landscape Gardening—Cridland....	2.65	Productive Orchard—F. C. Sears... ..	2.65
Bush Fruits—By F. W. Card.....	3.15	Landscape Gardening—The Com- plete Garden—Albert D. Taylor... ..	6.15	Principles of Fruit Growing—Bailey	2.65
California Fruits and How to Grow Them—E. J. Wickson, A. M....	4.15	Landscape Gardening—O. C. Simonds	6.15	Principles of Pruning—Kains.....	2.65
Citrus Fruits—J. E. Coit.....	3.40	Manual American Grape Growing— Hedrick.....	3.40	Pruning Manual—By L. H. Bailey... ..	2.65
Commercial Apple Industry of North America.....	3.85	Making Horticulture Pay—Kains....	1.90	Putnam's Garden Hand Book.....	2.00
Cyclopedia of Hardy Fruits By U. P. Hedrick.....	6.20	Manual of Fruit Diseases—L. R. Hessler, H. H. Whetzel.....	3.15	Quince Culture—W. W. Meech.....	1.35
Dwarf Fruit Trees—Waugh.....	1.00	Manual of Fruit Insects—M. V. Slingerland, C. R. Crosby.....	3.90	How To Grow Roses—Robert Pyle... ..	1.50
Farm Bureau Movement—O. M. Kille	2.15	Manual of Gardening—L. H. Bailey... ..	3.40	Rose—H. B. Ellwanger.....	1.40
Fertilizers and Crops By Dr. L. L. Van Slyke.....	3.40	Manual Tropical and Sub-tropical Fruits—Popenoe.....	3.90	Rose in America—McFarland.....	3.15
Fertilizers—Edward B. Voorhees... ..	2.65	Manual of Tree Diseases—Rankin... ..	3.40	Sales Promotion By Mail.....	2.15
Field Notes on Apple Culture By Dr. L. H. Bailey.....	.90	Manual of Vegetable Garden Insects By Crosby & Leonard.....	2.90	Small Fruit Cultivist—A. S. Fuller... ..	1.75
First Principles of Soil Fertility By Alfred Vivian.....	1.50	Manures and Fertilizers—Wheeler... ..	2.65	Soils—E. W. Hilgard.....	4.25
Forests of N. Y. State—Recknagel... ..	2.65	Modern Fruit Marketing—Brown... ..	1.90	Soils—Lyon-Fippin-Buckman.....	3.40
Fruit Growing in Arid Regions.....	2.75	Modern Propagation Tree Fruits— B. S. Brown.....	1.65	Soils—F. H. King.....	2.40
Fruit Garden—P. Barry.....	2.40	Nature's Garden—Neltje Blanchan... ..	6.30	Soils—By Charles W. Burkett.....	1.90
Fruit Harvesting, Marketing—Waugh	1.90	Nursery Manual—Dr. L. H. Bailey... ..	2.65	Spraying Crops—C. M. Weed.....	1.00
Fruit Insects—Crosby.....	3.90	Natural Style Landscaping—Waugh	2.65	Standard Cyclopedia of Horticulture Edited by L. H. Bailey. In six vol- umes, 3,600 pages, 4,000 text engravings, 96 sepia halftones. 500 collaborators. May be had on installment payments.....	40.00
Fumigation Methods.....	1.90	Nut Cultivist—Andrew S. Fuller... ..	2.15	Strawberry in North America—S. W. Fletcher.....	1.90
Gardening for Pleasure—Henderson... ..	2.15	Nut Growing: Latest Information; Guide to Propagating—By Rob- ert T. Morris.....	2.65	Strawberry Growing—S. W. Fletcher	2.40
Gardening for Profit—Henderson... ..	2.15	Old Time Gardens—Alice M. Earle... ..	2.65	Success in the Suburbs—John R. Mc- Mahon.....	2.15
Grape Growers Guide—Chorlton... ..	1.65	Ornamental Gardening—E. A. Long... ..	2.15	Successful Fruit Culture—Maynard	1.75
Grape Cultivist—A. S. Fuller.....	2.15	Principles of Floriculture.....	3.40	Surgeon's Philosophy—Dr. R. T. Morris.....	3.15
Greenhouse Construction—Taft.....	2.40	Parsons on the Rose—Parsons.....	1.75	Systematic Pomology—Waugh.....	1.90
Greenhouse Management—Taft.....	2.40	Peach Culture—J. A. Fulton.....	1.65	Ten Acres Enough—I. P. Roberts... ..	1.75
Hedges, Windbreaks, Shelters.....	1.00	Peach Growing—By H. P. Gould....	2.65	Wild Fruits, How to Know—Peterson	2.15
Roses—How to Grow—Robert Pyle... ..	1.50	Pear Culture for Profit—Quinn.....	1.35	Wind and Weather—McAdie.....	1.40
Injurious Insects—F. L. Washburn... ..	2.65	Picturesque Gardens—Henderson... ..	2.25		
Insects of Economic Importance— Herrick.....	2.15	Plant Breeding—By Dr. L. H. Bailey	3.40		
Insect Book—Dr. L. O. Howard... ..	6.30				
Insects and Insecticides—Weed.....	2.15				
Insect Pests of Farm, Orchard and Garden—Sanderson and Peairs... ..	4.65				
Insecticides and Fungicides.....	3.20				
Irrigation Farming—L. M. Wilcox... ..	2.40				

A paper which gives the best value for the money to the reader will give the best value to the advertiser as well. I don't think there is any argument about the soundness of this view.—H. Dumont, Chicago, Ill., in Printer's Ink.

WANTED Names and Addresses of Owners of Groves of Native Nut Trees in Northern States.

In the interest of Northern Nut Culture this Journal desires the above information to serve as a basis for extension of Nut Culture.

Readers will confer a favor by sending us lists of names and addresses of those who have stands of nut trees on their property, (with some account of productivity if practicable). Black walnut, English walnut, butternut, hickory, chestnut, filbert, etc.

American Nut Journal P.O. Box 124 Rochester, N. Y.

BUDDED and GRAFTED Nut Trees

Start right with my hardy Pennsylvania grown trees and be assured of success. Attractive Catalogue Free.

I have this season a fine lot of stake trained Pecan, English Walnut, Black Walnut and Persimmon trees budded on root pruned transplanted stocks, that will please you and that will transplant easily and rapidly. Write for catalogue.

J. F. JONES, The Nut Specialist
LANCASTER, PA.

THIS SPACE

58c Per Week Under Yearly Contract

Including Publication in both AMERICAN NURSERYMAN and AMERICAN NURSERY TRADE BULLETIN. (\$2.60 per Month)
One Month: \$2.80 in both.

PFCANS

We are the pioneer growers of budded and grafted pecans in the South. Have a complete stock of the leading standard varieties. Can furnish trees we know will please and give satisfactory results. Catalog free.

INTERSTATE NURSERIES
C. M. Griffing & Co. Props., Jacksonville, Fla.

Texas Pecan Nursery Arp, Texas

THE PEOPLE THAT GROW
WELL-ROOTED PECAN TREES

CONSULTING TROPICAL HORTICULTURIST and TREE EXPERT

HARVEY C. STILES

CHOCOLATE BAYOU, TEXAS

Specializing in Pecans, Grapefruit, Avocados, and Landscape Development. Long experienced expert for—and present active director of—many such large projects throughout tropics and semi-tropics. Examinations, Reports, Plans, Specifications and Estimates. Correspondence suggested.

Have You Nuts to Sell?

HICKORY NUTS BLACK WALNUTS
BUTTERNUTS CHESTNUTS

Hundreds of buyers are asking where the nuts can be obtained in quantity. Place your Sale Advertisement in the AMERICAN NUT JOURNAL for quick returns. \$2.80 per inch.

39 State St., Rochester, N. Y.

American Nut Journal

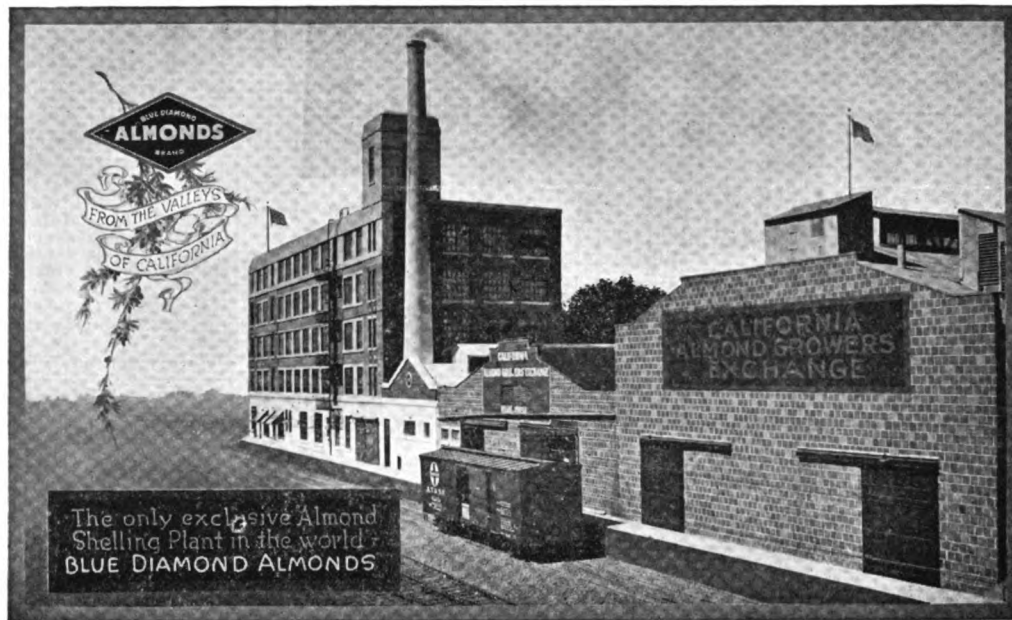
**DEVOTED TO NUT GROWING INTERESTS
GENERALLY THROUGHOUT THE AMERICAS**

Vol. XIX. No. 2

AUGUST, 1923

Per Copy 20c.

©
SB401
A51



THE AMERICAN FLAG

Flies over this \$300,000 shelling plant and warehouse of the California Almond Growers' Exchange, situated in the heart of American Almond Acreage at Sacramento, California

39 STATE ST.



ROCHESTER, N. Y.

American Fruits Publishing Co.

ORIGIN AND CHARACTERISTICS OF LEADING VARIETIES OF PECANS

By Prof. E. L. Overholser, University of California

Variety	Origin	Dissemination	Size	Thickness of Shell	Quality	Remarks
Burkett	Texas	Adapted to W. arid regions	Large	Thin	Excellent	Very productive
Busseron	Indiana	New; Promising for N. range	Medium	Average	Very good	Prolific
Delmas	Miss.	Widely disseminated	Large to very large	Moderate	Highest	Blooms early; ripens crop late; subject to scab
Frotscher	La.	Widely. Popular in S. W. Ga. and La.	Large	Very thin	Medium	Free from disease; shy bearer
Greenriver	Ky.	New; promising for N. range	Below medium	Average	Excellent	
Indiana	Ind. Seedling of Busseron	New; promising for N. range	Medium	Average	Very good	Prolific. Ripens crop early
Major	Ky.	New; promising for N. range	Slightly below medium	Thin	Excellent	Kernel unusually plump
Moneymaker	La.	Widely disseminated	Medium	Moderate	Fair	Very prolific. Ripens crop early in fall.
Pabst	Miss.	Widely disseminated	Large	Somewhat thick	Good	Generally prod.; late coming into bearing
Schley	Miss.	Widely, one of best known	Medium to large	Very thin	Very good	Mod. prod.; susc. to scab; one of most popular varieties
Stuart	Miss.	Most extensively planted	Medium to large	Average	Good	Cracking quality fairly good. Mod. prod.
Success	Miss.	New	Large to very large	Medium thin	Very good	Cosmopolitan Highly prolific
Texas Prolific	Texas	Appears to be adapted to W. arid sections	Large	Medium	Rich and sweet	Usually prolific
Van Deman	La.	Widely disseminated	Large to very large	Medium thick	Rich, very good	Losing popularity due to susc. to scab
Warrick	Ind.	New; promising for N. range	Slightly below medium Moderate	Moderate thin	Rich, excellent	Parent tree prolific

PROFITABLE PECAN TREES

By careful methods of bud selection and culture we grow trees that yield Profitable Nut Crops. This fact is proven in our own large orchards and in the orchards of our customers. Our trees make satisfied customers.

We can supply all standard varieties. Make your reservations early to insure delivery when wanted.

Summit Nurseries

Monticello, Florida.

FOR SALE
5 ACRE PECAN GROVE LOCATED IN THE UNITED PECAN GROVES AT PUTNEY, GEORGIA. TREES PLANTED 9 YEARS AND IN GOOD CONDITION—UNDER CARE OF PAPER SHELL PECAN GROWERS ASSOCIATION.
PRICE, \$2,500—A BARGAIN FOR QUICK SALE. ADDRESS G. E. HADDEN, 6016 HAYES AVE., LOS ANGELES, CALIF.

Budded and Grafted
HARDY NORTHERN NUT TREES
Best varieties, grown in natural nut soil. Send for catalog. Have your seedling nut trees topworked to these fine varieties.
Information and estimate on request.
INDIANA NUT NURSERY
Rockport. J. F. Wilkinson, Prop. Indiana

ORCHARD OWNERS OF THE SOUTH-EAST AND GULF STATES

Reports furnished on pecan and fruit orchards, giving variety, age, size and condition of each tree; also notes on general conditions and needs of orchards. Care and management of orchards a specialty.

HORTICULTURISTS INCORPORATED
6th Floor, Exchange Bank Building
Albany, Ga.

PECAN TREES

We Grow Them Right
We Pack Them Tight
We Price Them Right
Southern Nut Tree Nurseries,
THOMASVILLE, GA.

PECAN TREES

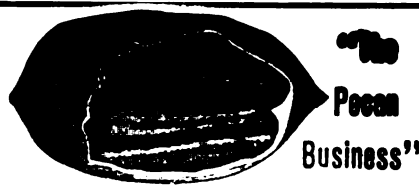
100,000 TREES—STANDARD VARIETIES
WE GROW NOTHING BUT PECAN TREES
HIGH QUALITY—SERVICE THE BEST

SIMPSON NURSERY CO., MONTICELLO, FLA.

THIS SPACE

\$2.50 Per Month Under Yearly Contract

Under less than yearly term:
\$2.80 Per Month



NEW EDITION FREE

A practical guide showing how to bud pecans. Tells how to grow trees 12 inches in diameter by the end of the 8th year, which yielded 400 lbs. nuts per acre.

Trees, Nuts, Groves for sale direct without agent at attractive reduced prices
B. W. STONE, Thomasville, Ga.

SUCCESS

and other leading varieties. Also citrus

BECHTEL PECAN NURSERIES

Ocean Springs, Miss.

PECAN TREES

Plant them this year! Buy direct from nursery and save agent's profit. All standard varieties; quality and service the best. Write us for prices.

FLORIDA NURSERIES

W. W. Bassett, Prop., Monticello, Fla.

AMERICAN NUT JOURNAL CHIEF EXPONENT OF AMERICAN NUT INDUSTRY

Of National Circulation

Covering Every Phase of Nut Culture

Subscription: - - \$2.00 Per Year
Advertising: - - \$2.80 Per Inch

Official Journal { National Pecan Growers Association
Northern Nut Growers Association

AMERICAN FRUITS PUBLISHING COMPANY

39 State Street, Rochester, N. Y.

AMERICAN NUT JOURNAL --- SEPTEMBER, 1923

EDITORIAL DEPARTMENT—Communications on any subject connected with Nut Growing and Distribution are cordially invited by the editor; also articles on this subject. We shall be pleased to reproduce photographs of trees of interest, methods and scenes connected with the Nut Industry; portraits of individuals, etc. Suggestions are cordially welcomed.

ADVERTISING—Advertising forms close on the 10th of each month. If proofs are wanted, copy should be in hand on the 1st.

Advertising rate: 20 cents per agate line; \$2.50 per column inch for any amount of space.

Advertisements that do not represent reliable concerns will not be accepted.

SUBSCRIPTIONS—The "American Nut Journal" will be sent to any address in the United States for \$2.00 a year; to Canada or abroad for \$2.50 a year. Three years: in United States, \$5.00; Canada, \$6.50.

Add ten cents for exchange unless bank draft, express or postal money order is used.

WHAT THIS JOURNAL STANDS FOR—Reliable information on all phases of the Nut Industry. It is for the advancement of Nut Growing in general; it is in no way confined to the interest of a particular kind of nuts, nor of a particular section. It is broad in scope and absolutely independent. The aim of "The American Nut Journal" is to stimulate thousands of persons into developing interest in one of the greatest food supplies of the future—to line the roadsides and fill the waste places with trees of a sort which yield dollars worth of fruit every year instead of the mere bunches of leaves resulting from present shade and ornamental planting. At the same time it will record the progress of the industry, the latest descriptions in the note book of the biologist and plant physiologist, the rapidly expanding knowledge of methods, the increasing acreage, and in short the news as it develops of an industry whose importance is recognized by an increasing number of persons in all sections.

Entered as second-class mail matter June 6, 1914, at the post office at Rochester, N. Y., under the Act of March 3, 1879.

AMERICAN FRUITS PUBLISHING COMPANY INC.

Ralph T. Olcott, Editor and Manager

121-123-125 Ellwanger & Barry Bldg., Rochester, N. Y.

Classified Business Announcements In This Issue.

Albany Pecan Nut Exchange Marketing of Pecans.....	55	Northern Nuts.....Sources Wanted.....	60
Bassett, W. W.....Pecan Trees.....	42	"Nut Growing".....New Book.....	59
Bechtel's Pecan Nurseries...Grafted Pecan Trees.....	42	Nut Information.....Special Topics.....	43
Daly, Charles.....Pecan Grove for Sale.....	55	Nuts as Staple Food.....Dr. J. H. Kellogg.....	43
Flint River Pecan Co.....Pecan Nursery Stock.....	59	"Nut Trees for the North".....Expert Advice.....	43
Florida Nurseries.....Pecan Trees.....	42	Pecan Land for Sale.....In Georgia.....	59
Griffing & Co., C. M.....Pecan Trees.....	60	Simpson Nursery Co.....High Grade Pecan Trees.....	42
Harlan Farms Nursery.....Special Announcement.....	60	Selkirk, Edward A.....English Walnut Grove.....	55
Hadden, G. E.....Pecan Grove for Sale.....	42	Southern Nut Tree NurseriesPecan Trees.....	42
Horticulturists, Inc.....Southern Pecan Experts.....	42	Stiles, Harvey C.....Tree Expert.....	60
Indiana Nut Nursery.....Northern Pecan Trees.....	42	Stone, B. W.....Pecan Trees, Nuts, Groves.....	42
Inter-State Nurseries.....Pioneer Pecan Growers.....	60	Summit Nurseries.....High Grade Pecan Trees.....	42
Jones, J. F.....Grafted Pecan Trees.....	60	Texas Pecan Co.....Special Announcement.....	49
Kirk, John W.....Pecan Property for Sale.....	55	Wilco Machine Co.....Nut Cracking Machine.....	55
Lancaster Nut Nurseries.....Northern Nut Trees.....	60	Wilkinson, J. F.....Grafted Pecan Trees.....	42
Logical Market Place.....For Selling Nuts.....	59	Woldert Co., Alex.....Squirrel Nut Cracker.....	55
Manual of Grafting.....Biederman Method.....	55	Woodson, Robert E.....Nut Cracking, Grading Machines..	53
Monticello Nursery Co.....Budded and Grafted Pecan Trees.....	55		

IMPORTS OF NUTS INTO THE UNITED STATES, FOR CONSUMPTION, DURING THE LAST THIRTEEN YEARS

(Compiled by Bureau of Commerce and Navigation, Department of Commerce, Especially for the "American Nut Journal.")

KIND	1909	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919	1920	1921
Almonds—not shelled.....lbs.	2,120,632	6,810,056	3,762,654	5,242,563	2,363,860	5,501,059	4,684,598	2,368,369	4,901,168	6,149,374	7,482,538	6,460,732	5,068,215
Shelled.....lbs.	8,538,054	10,496,750	12,160,635	11,632,988	12,655,057	13,896,621	12,168,153	13,210,668	19,160,258	21,544,757	28,007,908	18,769,628	21,572,634
Apricots and peach kernels lb.		27,854	13,551	7,939	18,769	18,572	67,164	11,926	250,075			65,175	32,686
Coconuts in the shell... Dollars	\$1,246,463	\$1,298,970	\$1,704,262	\$2,012,203	\$1,793,713	\$2,150,500	\$1,593,666	\$1,891,328	\$2,583,560	\$2,490,368	\$4,053,282	\$4,239,221	\$2,293,009
Coconut Meat broken or Copra not shredded, desiccated or prepared.....lbs.	23,742,518	20,830,539	38,081,984	64,505,787	54,283,592	44,459,158	88,690,382	108,507,765	247,043,127	430,649,332	268,637,781	215,188,461	189,320,950
Desiccated, shredded, cut or similarly prepared.....lbs.	5,461,602	5,985,308	6,961,850	5,396,465	6,826,095	9,307,924	5,866,806	7,947,390	10,491,796	20,269,909	29,637,674	30,631,029	35,633,497
Cream and Brazil.....bu.	461,496	461,496	277,679	a21,601,008	a11,933,139	a11,431,531	a21,483,319	a12,489,217	a16,213,023	a11,282,098	a43,076,338	a13,035,436	a37,102,046
Filberts—not shelled.....lbs.	7,365,837	10,026,961	10,084,987	8,375,860	8,596,278	10,36,072	10,922,248	10,003,552	16,468,547	7,432,524	16,747,349	14,856,364	14,092,336
Shelled.....lbs.	1,384,689	1,413,391	2,332,606	1,368,835	1,450,620	1,788,147	1,722,705	1,259,540	2,280,787	4,245,863	3,778,906	4,711,293	4,233,167
Marrons, crude.....lbs.		10,270,398	9,968,879	14,845,345	10,157,321	18,849,257	12,549,959	15,754,796	6,275,030		5,021,146	29,484,637	23,340,988
Olive nuts, ground.....Dollars	\$580	\$478	\$236	\$206	\$342	\$385	\$25	\$112	\$420			\$132	\$189
Palm and Palm Nut Kernels.....Dollars	\$2,752	\$6,907	\$5,744	\$7,970	\$4,872	a23,127	a31,900	a1,104,885	a626,435	a16,905,313	a5,610,066	a8,329,034	a230,194
Peanuts or Ground Beans.....lbs.	7,326,371	11,297,172	11,055,823	12,660,433	12,140,612	17,298,778	14,075,387	9,623,411	7,710,082	1,970,797	5,667,354	7,222,486	4,803,677
Unshelled.....lbs.	1,302,919	16,089,919	7,821,505	3,127,829	7,823,173	21,819,101	11,695,507	19,739,888	27,548,928	67,746,831	24,179,687	103,552,486	36,406,865
Shelled.....lbs.	1,480,289	3,349,460	2,333,077	2,607,227	1,803,434	2,621,161	2,032,539	1,265,382	4,076,933		2,194,690	1,092,300	1,092,300
Pecans.....lbs.	17,432,885	23,269,974	21,146,116	22,208,845	16,363,046	16,134,211	20,988,326	22,610,418	17,177,992	3,304,003	21,235,078	17,339,090	31,821,639
Walnuts—not shelled.....lbs.	8,781,908	10,960,988	11,244,054	10,713,286	10,093,622	11,636,053	10,552,956	13,445,790	12,257,593	9,707,401	10,260,899	13,972,917	12,264,080
Shelled.....lbs.													
All other shelled or unshelled, not specially listed.....lbs.	9,938,337	3,584,544	2,982,663	3,050,989	3,600,056	3,272,492	2,790,589	2,769,634				3,763,973	3,890,676
Total of nuts imported Dollars	\$8,549,997	\$12,775,186	\$14,265,572	\$15,626,485	\$13,508,307	\$19,815,713	\$16,865,244	\$20,594,434	\$33,667,688	\$49,930,283	\$17,499,069	\$68,752,801	\$37,376,572

Nut Culture Information

Reprint folders on topics discussed in American Nut Journal. 10 Cents Each

Grafting and Budding the Walnut—U. S. Dept. Agriculture.
 Pecan Areas of the United States—W. P. Reed.
 Walnut Trees For New England—Dr. Robert T. Morris.
 Some Walnut Varieties—Dr. L. D. Batchelor.
 Chip Buds For Nut Trees—Charles L. Edwards.
 Grafting, Budding, Topworking—Dr. W. C. Deming.
 Breeding Chestnuts for Disease Control—U. S. Dept. Agr.
 Advent of Nuts as Staple Food—Dr. J. H. Kellogg.
 Underworking Nut Trees—Charles L. Edwards.
 The Ubiquitous Black Walnut—T. P. Littlepage.
 Average Yield of Pecan Orchard in S. W. Georgia.
 Value of Nuts As Food—Dr. W. C. Deming.
 Improved Black Walnut a Good Investment—Henry Stabler.
 Status of Pecan Industry—C. A. Reed, U. S. Nut Culturist.
 Sources of Supply of Hazel Nuts—Bulletin Imperial Institute.
 Top-Grafting the Walnut Tree—Ferd Groner.
 Black Walnut As a Meat Producer—Henry Stabler.
 \$2,000 an Acre by Top-working Pecan Trees—Stiles.
 Outline of Northern Nut Culture Activity—Dr. W. C. Deming.
 Establishing the Filbert Grove—George Dorris.
 Top-Working Northern Pecan Trees—J. F. Wilkinson.
 Nut Trees for Highways and Public Places—W. S. Linton.

American Nut Culture—24-page Pamphlet Survey.
 East Texans Reap Fortunes on Pecans.
 Hazel Blight—Dr. Robert T. Morris.
 Co-operating in Marketing Pecans—William P. Bullard.
 Cost and Development Pecan Unit Orchards—J. M. Patterson.
 Why Pecan Trees Bear Alternate Years—C. A. Reed.
 List of Nut Trees for Northern Planting—W. G. Bixby.
 Franquette Walnut Orcharding Pays Well—Turk.
 American Nut Industry—C. A. Reed, Nut Culturist.
 What Nuts to Plant in Northern States.
 Pecan Rosette; Practical Treatment—W. A. Weaver.
 English Walnut: Where To Plant It.
 Nut Tree Grafting by an Easy Method—Dr. Robert T. Morris.
 Purchase of Chestnut Tree With Reference to Blight—G. F. Gravatt.
 Quick Results in Pollenizing Pecans—E. E. Rislen.
 Nut Trees to Reduce Food Costs—Chas. Lathrop Pack.
 How To Guard Against Faulty Nuts—Harvey C. Stiles.
 The Romance of the Pinon Nut Industry in New Mexico
 Soil Fertility; Fertilizer Problems in Pecan Culture—J. J. Skinner, U. S. Department Agriculture.
 The Future of the American Grown Filbert—Richard H. Turk.
 The Future of Nut Growing—Dr. Robert T. Morris.
 The Lewis Hardy Black Walnut—H. R. Mosnat.
 A Woman's Close Study of Pecans for the Table.

AMERICAN FRUITS PUBLISHING CO., 39 State Street, Rochester, N. Y.

PLANTING, CARE, CULTIVATION OF PECAN ORCHARD

By C. A. Simpson, Monticello, Fla

UNTIL the last few years many people gave you the free advice that all you had to do to get a bearing pecan orchard was to plant the trees and forget about them for eight or ten years and then go out and gather the nuts. This, of course, is all wrong and is on the principle of getting something for nothing. For best results the pecan orchard must have the same good care that is given the peach or the apple.

To get started right buy your pecan trees from a reputable Nurseryman and varieties that do well in your locality. Buy trees that are thrifty—having a top one or two season's growth from time of budding or grafting and not old stunted trees. These trees should be dug with a tap root approximately 30 inches in length. A tree with a short root is not so liable to live, especially if the first season should be dry. The height of the tree should be not less than four feet for best results. In fact (other conditions being equal) the larger the trees up to ten feet in height when planted, the sooner you will have a large orchard tree and the sooner it will bear.

Never plant a seedling tree, as in most cases they are a small and inferior nut. The time a seedling tree begins to bear is very uncertain and a tree may sometimes not bear before 15 or 20 years.

Pecan trees in northern part of Florida and southern part of Georgia should not be planted closer than 50 feet each way, or 17 to the acre. Some are planting but 12 to the acre or 60 feet each way. One very large commercial orchard is now being planted in Florida with 18 trees to the acre 35 feet one way and 70 feet the other, with the idea of cutting out every other tree when they begin to crowd each other at 12 to 15 years of age. This is a good idea. With this method each odd tree in a row can be one variety and each even tree another variety and the variety that is the best commercial success can ultimately be left and the poorer one cut out.

It is best to have a surveyor lay out your orchard for you if it is any size. If a small one it may be laid off in straight lines in each direction by sighting on tall poles and placing a stake where each tree is to be.

The holes should be dug before the trees arrive, and should be not less than two feet in diameter, and thirty inches deep. When digging the hole, keep the top soil separate from the subsoil, as only the top soil should be used when planting the tree.

The best time to plant pecan trees is as soon as the leaves have normally dropped as they stand in the nursery row. This is usually the 1st to the 15th of December. December is a better time to plant than January; and January is better than February. Pecan trees ought not to be planted later than February. When planted in December the winter rains pack the ground around the tree very thoroughly and the roots then have plenty of time to calous over before the growing season starts. The trees will live better when planted in December and

they will also grow the most the first year.

Most varieties of pecans do best on Norfolk fine sandy loam, the orangeburg or the greenville type of soil. A sandy top soil with a good clay under it within 10 to 15 inches seems to be the most suitable. As a rule sandy soils with no clay underneath, or the clay 24 inches or more below is not the type of soil for pecan. There are, however,



C. A. SIMPSON, Monticello, Fla.
Simpson Nursery Co., President National
Pecan Growers Association

soils in the South that are more or less sandy with no real clay subsoil that seems to be suitable to the pecan. As a rule though, first be convinced by the performance of bearing trees in such sandy soils, before you plant in it. A clay subsoil 10 to 15 inches below the surface is the safest. The "flat woods" type of sandy soil in many places is suitable and it has no subsoil near the surface. In all cases a well drained soil is required, free from hard pan. A pecan tree does not like wet feet, yet I have seen a very successful pecan orchard near the gulf with water table only six feet below the soil surface. The surface soil of this orchard however was well drained.

It is usual to have the limbs of the pecan trees to begin to form at a height of five feet from the ground. It is therefore necessary to cut off the tops of all trees when planted to a uniform height of five feet regardless of the size of tree planted. The side limbs should also be cut off at planting time. Also see that all the root ends have a smooth cut surface. All this cutting should be done before you plant the tree.

A pecan tree is not so hard to transplant and make it live if you will but use a little caution. Never let the roots of the pecan tree get dry through exposure to sun or wind; this is most important. When you receive the trees from the nursery they will arrive in bales or boxes with moisture-holding material packed around the roots. As soon as you receive them heal them in moist dirt and cover well above the roots and with the tops pointing to the South or East. The tops pointed in this direction will

prevent cold winds passing through possible openings in the dirt and reaching the roots.

When these trees are removed from the heel for planting, the roots should be thoroughly sprinkled with water and immediately placed in the wagon with a good bed, and covered with wet sacks. Or if planting on a large scale, a good plan is to heel the trees in the wagon bed with the packing material used for shipping. In any case do not remove but one tree at a time from the wagon and place it immediately in the hole and plant it. By all means get the tree into the ground with the root moist.

When the tree is placed in the hole, someone lines it up with the other trees by sighting each way, while a man in the hole holds the tree in place. This man also holds the tree at a height so that when planted, it will be at the same depth in the ground as it stood in the nursery row or not more than one inch deeper. Never a less depth as the hot sun on the exposed root would soon kill the tree. In filling the hole use the top soil only, and as each spadeful of dirt is thrown in, it should be thoroughly tramped. The tighter the dirt is tramped the better. As this dirt is tramped the lateral roots of the tree can easily be kept horizontal.

If you have some well rotted manure, by all means place about three forkfuls at each hole just ahead of the planting and add when the hole is filled to within six inches of the top, then scatter this manure over the area of the hole, but beginning out beyond the ends of the roots of the trees. Never let the manure touch the roots. When the manure is applied, then finish filling the hole with top soil. This treatment gives the tree an excellent start.

CULTIVATION

Cultivation of the young pecan orchard should start about March 15th for Northern Florida and Southern Georgia. Depending on weather conditions a cultivation about every ten days till the first to middle of July is sufficient. During this time the tree rows should have clean cultivation and never allow any weeds to grow near the trees.

About the first of July the cultivated space on each side of the tree rows should be planted to Iron or Brabham cow peas to be turned under in the fall. Do not plant any other variety of cow peas as they are subject to nematodes.

In the fall the land along the tree rows should be turned and preferably sown to oats or rye, to be turned under the following spring about March 15th. This will add considerable humus to the soil.

It is far better to have crops grow between the tree rows for the first five or six years than it is to let this ground be idle and only cultivate the tree rows. Theoretically one should never take any crops off the land that is planted to a pecan orchard and the summer legumes and winter crops be turned under. A pecan orchard does best where the land is full of humus and the turning under of crops is the only way to get the humus. However, there is a practi-

cal way of growing crops in between the tree rows and still build up your humus contents, by a proper method of rotation of crops in connection with legumes. If this is done intelligently you will get about the same returns from the crops per acre as you did from the land before pecan trees were planted.

Of course each year the pecan trees will have to have a wider cultivated space and consequently a greater distance to the first row of crops. For the first two years the first crop row should not be closer than five feet from the tree row; for the third and fourth year about eight feet and for the fifth and sixth year about ten feet. After that no farm crops should be raised in between the rows, but plant cow peas, velvet beans or beggarweed, to be turned under in the fall.

The United States Department of Agriculture has experimented with commercial fertilizer to determine the best mixture and amounts to be used for different aged trees. For the young orchard not bearing, they recommend 6% ammonia, 8% phosphoric acid and 3% potash. Three per cent of the ammonia to be derived from nitrate of soda and the remainder to be one-half from cotton seed meal and one-half from either fish scrap, tankage or blood. The phosphoric acid to be derived from acid phosphate. Use high grade sulphate of potash for potash. For bearing orchards use 4% ammonia, 10% phosphoric acid and 3% potash. The Government authorities recommend one to two pounds of this commercial fertilizer the first year and gradually increase to 30 to 40 pounds by 12 to 15 years. This should be applied just ahead of the first cultivation in March.

VARIETIES

The standard varieties mostly planted in the South are Stuart, Schley, Alley, Money-maker, Frotscher, Pabst, Moore, Success, and about in the order named. The Schley and Alley are not recommended for planting within 100 miles of the Gulf, neither is Van Deman or Delmas, as these varieties are affected with a fungus disease called scab which cause the nuts to drop. As to the variety you should plant in your particular locality, you should be guided largely by what the varieties now planted are doing. In the Monticello district we think very highly of the Moore and Moneymaker. The Moore originated in Jefferson county, and bears at an early age and is very prolific. The nut matures in the fall about two or three weeks earlier than the Stuart and Schley. The Moneymaker is also a prolific bearer and matures a very little later than the Moore. The Moneymaker is the most resistant to rosette, although not immune from it. In general the Stuart is no doubt the safest variety to plant, as well as the Schley when 100 miles from the Gulf.

A budded or grafted pecan tree will bear a few nuts the third year and gradually increase. By the eighth or tenth year the commercial crops will begin and from then on till the 15th year the increase in yield per year is very rapid. With proper varieties on good land and trees well cared for, commercial crops ought to begin by the seventh year. When in full bearing a pecan orchard will net you anything up to \$500 per acre, depending on your varieties, soil, and care given.

Most varieties are ripe enough in North Florida to begin gathering about October 10th, with the Moore two or three weeks earlier. The nuts should be gathered and shipped just as soon as ready, and by all

One Million Pecan Trees For Eastern North Carolina

The state horticulturist of North Carolina, C. D. Matthews, Raleigh, N. C., will attend the annual convention of the Northern Nut Growers Association in Washington, D. C., September 26-28 and will outline the work done at the North Carolina Experiment Station in nut culture. Mr. Matthews, who is chief of the division of horticulture, says:

"We have been conducting investigations with pecans at this station for the last sixteen years. The work has been conducted with the idea of determining the most desirable varieties and the northern limit of commercial pecan production. In addition

we have been working on the most desirable cultural practices to employ, as well as securing tree performance records of all the trees under our care.

"In the eastern part of our state commercial pecan growing has been developed in a small way but with splendid success. This, together with our investigational work, has made it apparent that commercial pecan growing in Eastern Carolina is a very promising proposition.

"We are planning this fall for a campaign to plant one million pecan trees in Eastern Carolina."

means they should be in the hands of the retailer for the holiday trade. The price drops very materially right after the Christmas holidays. Last year the prevailing prices to the grower were 35 to 40 cents for Moore and Moneymaker, 45 to 50 cents for Stuart, Pabst, Success and Frotscher and 65 to 70 cents for Schley. The very large grade of Schley brought as much as 90 cents per pound.

When time for gathering arrives, the space under the trees should be put in clean condition by plowing or disking with the tractor, or a canvas spread under each tree at the time the nuts are knocked down. The former method is mostly used. The nuts are knocked to the ground with long bamboo poles, and then put in sacks. A separate sack for each tree should be used to prevent mixing of varieties. To get the best price for the nuts they should be graded according to diameter. There are regular machines built for this purpose, costing all the way from \$50 to \$600. After they are graded they are dried to a certain extent by forced hot air circulation or spread out to not more than three inches in depth and left in a warm room with good ventilation for four to eight days. If the nuts are not allowed to dry to some extent, they will mildew when placed in shipping bags or boxes. If bags are used for shipping the nuts, they should be double. If boxes are used they should be tight at all cracks to prevent theft in transit and well strapped with iron or wire.

INSECTS AND DISEASES

The most common disease is rosette which usually appears on poor land and where pecan trees should never be planted anyway. Plenty of humus put in the ground will usually overcome rosette. Another common disease on certain varieties in the southern part of the pecan belt is a fungus disease called scab. If not sprayed for, this is likely to be serious with these certain varieties during a wet season, and may cause most of the nuts to drop.

There are but two serious insects, the leaf case bearer and the nut case bearer. The former only occurs along the coastal regions and one spray in August with arsenate of lead will readily control it. The nut case-bearer occurs in a few places only, but is serious in certain years in those localities. This is a small worm which eats its way into the nut at its base. So far no effective spray control has been discovered. There are three broods during the summer and during the bad years they will cause a loss of the crop as high as 90%.

However, the insects and diseases of the pecan are small in number in comparison to those of the peach and apple and for the

present should not prevent anyone from planting a pecan orchard.

If every farm had a five or ten acre well cared-for pecan orchard on it, it would revolutionize the economic conditions on the farm. A pecan orchard should bear from one to two hundred years. Pecan trees in the forests are known to be at least four hundred years old. There is no safer investment than a well-cared-for pecan orchard, and no other orchard will give you returns anything like the length of time. Plant a pecan orchard while you are young. You, your children, grandchildren and great-grandchildren will benefit thereby.

Missouri College Nut Work

Prof. T. J. Talbert, department of horticulture, Missouri College of Agriculture, Columbia, Mo., says: "We are carrying on quite extensive investigational work in propagation of nut trees. Our principal work so far has been the top working of seedling walnuts to improved sorts. We have also grafted and budded the native hickory to improved varieties of pecan.

"We think this work important because every farmer in Missouri usually has from one to several acres of waste land on which walnuts and hickories usually are growing. It is our thought that the seedlings may be top-worked to improved varieties and furnish valuable nuts for the home and for the market. It will not in any way interfere with the trees as to their value for lumber."

Pecans in California

During recent weeks the California Agricultural Extension Service has held several conferences with pecan specialists from the southern states who are studying the possibilities of Southern California as a pecan district. The office of the Farm Advisor is making every possible effort to secure information relative to pecan possibilities in Southern California and expects to keep track of all the new plantings in order to secure the best possible information relative to the success of the new crop. Growers having a few pecan trees or those contemplating the planting of acreage to this crop are asked to confer with the Farm Advisor.

It Was A Good Report At That

Mrs. Murphy (to teacher)—"What do ye mane by writin' Poor Nut' on me Patrick's report car-rud'?"

Teacher—"Oh, that's the visiting physician's report, meaning Poor Nutrition."

J. M. Smith, Fort Gibson, Okla., is a strong advocate of black walnut for both nuts and timber. He has trees planted 12 years ago which are now 30 feet in height, with a spread of 25 feet and which have been bearing for six years.

AMERICAN NUT JOURNAL, the Official Journal, three years for \$5.00; twelve months, \$2.00; single copy 20c.

Coming Conventions of National and Northern Growers

Two important conventions of nut growers are to be held in the near future—that of the Northern Nut Growers Association at the National Museum, Washington, D. C., Sept. 26-28; that of the National Pecan Growers Association at the Seminole Hotel, Jacksonville, Fla., Oct. 2-4.

The program for the Jacksonville meeting was published on page 32 of the August issue of the *American Nut Journal*; that for the Washington meeting is published herewith.

In both cases the convention will be replete with valuable information and interesting events. Invariably those who attend regard the occasion as of the greatest importance to their interests. An open forum for discussion of practical topics is maintained daily at each of the conventions. Experts are in attendance to advise and to answer questions.

Reservations for accommodations should be made promptly. Secretaries J. Lloyd Abbot of the National Pecan Growers Association, Spring Hill, Ala., and William C. Deming of the Northern Nut Growers Association, 983 Main St., Hartford, Conn., are in charge of details.

The fourteenth annual convention of the Northern Nut Growers Association will be held in the auditorium of the New National Museum, Washington, D. C., Sept. 26-28, 1923.

Secretary W. C. Deming, with the assistance of members and the other officers has prepared the following outline of a tentative program. The schedule will have to be re-arranged at the meeting to conform to conditions. C. A. Reed and T. P. Littlepage, Washington, D. C., are arranging local details. They have planned interesting excursions.

OUTLINE FOR THE PROGRAM

Hotel Headquarters: The Harrington.

Call to order, 9.30 a. m., Auditorium New National Museum.

President's address.

Report of secretary.

Reports of Committees (standing):

Auditing, C. P. Close, chairman.

Executive, Dr. J. Russell Smith.

Finance, T. P. Littlepage.

Membership, J. S. McGlennon.

Programme, J. S. McGlennon.

Press and Publication, Ralph T. Olcott.

Hybrids, Dr. Robert T. Morris.

Nomenclature, C. A. Reed.

Promising Seedlings, C. A. Reed.

Reports of special committees:

Incorporation, T. P. Littlepage.

Uniform Bill for Roadside Planting, T. P.

Littlepage, Sen. Penney, Dr. Cannady.

Reports of State Vice-Presidents.

Appointment of Nominating Committee.

Appointment of other committees.

Resolutions.

Exhibits.

Moving pictures.

Announcements.

Addresses:

Dr. Robert T. Morris—Notes on Grafting by the Paraffin Method.

W. G. Bixby—Hickory Varieties as Stocks for Grafting.

Dr. W. C. Deming—Top-working Hickories in the North.

Mrs. W. N. Hutt—Woman's Influence on Nut Culture.

Prof. C. D. Matthews—A Million Pecan Trees for North Carolina This Year.

T. P. Littlepage—The Commercial Planting of Nut Trees.

Hon. W. S. Linton—Roadside Planting vs. Reforestation.

Prof. C. P. Close—Nut Trees for Ornamental Plantings, Shade Lawn, Roadside.

C. A. Reed—The Walnut Industry and the People of China.

Dr. Oswald Shriener—

Geo. N. Lamb, Sec'y. Am. Walnut Mfrs. Assn.—

J. F. Jones—Species and Varieties of Nuts for Planting in the Northern Districts.

J. A. Neilson—Nut Culture Opportunities in Canada.

Possibilities:

Dr. J. H. Kellogg, Mrs. W. D. Ellwanger, A. C. Pomeroy, Dr. Russell Smith, H. R. Webber, P. J. O'Connor, G. H. Corson, John Dunbar, H. D. Spencer, Dr. Wm. A. Taylor, J. M. Patterson, David Fairchild, Conrad Vollertsen, Sen. H. A. Penney, Dr. Lewellyn Jordan, F. W. McReynolds, D. C. Snyder.

Question Box.

Excursions.

Exhibits.

Reports of Committees.

Election of Officers.

Selection of Place for Next Convention.

Just mention AMERICAN NUT JOURNAL.

Iowa Exhibit of Nuts

An Associated Press despatch from Des Moines, Ia., on Aug. 29th said:

Nuts of more than 100 varieties, some of them from trees said to have been bearing fruit in Iowa when Columbus discovered America, are on display at the horticultural building of the Iowa state fair. The exhibition of nuts is the first ever made at the fair here.

Most of the exhibits are from the eastern part of the state, where rivers and natural timber make nut bearing trees most numerous. Des Moines, Henry, Lee and Benton counties are represented by a number of exhibits. Walnuts, hickory nuts, hazel nuts, pecans, chiquapins, Japanese walnuts, chestnuts, filberts and butternuts are among the classes shown and there are numerous hybrids of each variety.

Iowa has more native varieties of nuts than any of the commercial nut growing states east of the Mississippi, according to Earl Ferris, well-known Nurseryman, of Hampton, Ia., superintendent of the department of horticulture and flowers. All the nuts grown in Iowa now are from wild trees, but nut orchards are being planted over the state and Iowa will begin to market nuts in three or four years.

The pecans on exhibit are from a native Iowa tree, more than 100 feet high and three or four hundred years old. The Green-bay nut, a native and natural hybrid of pecan and hickory nut, is on exhibit; it comes from a tree more than 500 years old and still bearing fruit. Pecan trees have been known to bear fruit for 1,000 years, and are said to have a life of 2,000 years.

Iowa nut growers are experimenting in an effort to cross a pecan and an Iowa hickory tree to produce a nut with the richness and buttery flavor of the Iowa hickory nut and the thin "paper shell" of a pecan. Such a

nut, growers say, would soon become the most popular on the market.

One exhibit shows six varieties of nuts grown on one tree by top-grafting. The fruit is said to be the most perfect ever produced by top-grafting.

The chinquapins are much like chestnuts, but smaller. They are not natives of Iowa, but planted and cared for, and once brought through the first winter, they are hardy enough to stand the Iowa winters.

Among several classes of non-edible nuts are acorns and buckeyes. The latter are poisonous, and live stock dies from eating them, but the Indians ate them by peeling the thin shell off and washing them in running water to rid them of their poison. Peanuts grown in Iowa are also on display, but none of them are exceptional specimens, because the season here is too short for them.

Iowa nut growers expect to have on the market within a couple of years nuts from their planted orchards, which will begin to bear marketable fruit when they are six years old or so.

Comment on Indiana Nuts

In a recent communication to Moody Brenneman, Berne, Ind., Secretary W. C. Deming says:

"I thank you for the opportunity to examine the interesting nuts from your place. The two pecans are small, of the ordinary type of wild seedling nuts of the Indiana region. They are neither of any special value, although nice little nuts for household use. The shells are rather thick, they crack fairly well and the kernel is of fair quality. Of course, they are not Stuarts, although the Stuart when grown far north of its native habitat is much smaller than when grown where it is native. But if you can mature these nuts so far north I do not see why you should not be able to mature

the finer nuts of the Indiana type, such as the Indiana, Busseron, Butterick, Major and others. I hope that you will try some of these.

"The Siebold Japanese walnut is large, cracks well and has a plump kernel of the usual quality of these nuts. Not a high quality, yet I think this nut of some value, possibly a commercial nut for machine cracking.

"The butternut type of nut, seedling of the Siebold, is large, a very poor cracker and lacking in quality. It has not the butternut flavor at all, as have some of the nuts of similar type. It has none of the characteristics of the black walnut so far as I can see. The nut has no particular value, but is an interesting example of the reversion, or hybridization of the Japanese walnut, which is so common; especially interesting because of the absence of the butternut in the vicinity of the parent tree."

They're All For Him

A recent issue of the Creston, Ia., Daily Advertiser has the following:

Mosnat Nutty on Nuts; Breeding a New Brand

H. R. Mosnat, who came out from Chicago as the representative of the American Lumberman spent a couple hours of his time in the Advertiser office and he talked nuts so fast and so strong that we are for him in what he expects to do in the future.

Mr. Mosnat is of the belief that one of the greatest markets in the world is for black walnuts, and his ambition is to own a farm "down east" where he can plant all the trees he cares and breed the nuts to that point where the hard shell shall give way to the shell more like the English walnut. He travels over the country in the interests of the magazine and thus he is brought in close touch with all that happens to nuts in various states. He was formerly editor of the Belle Plaine, Iowa, Union, before going to Chicago. Now he wants a nut farm, and here is what he wants to do.

He wants to plant black walnuts, watch them as they grow and graft them to such

Southern Pecan Exchange Proceeds Despite Interruptions

Chairman D. W. Stone, of the organization committee of the Southern Pecan Growers Exchange, called a meeting of pecan growers at the Municipal Auditorium, Albany, Ga., Sept. 7th, to arrange details of operation. In his announcement Chairman Stone said: "The response to our first letter was most gratifying. One hundred and twenty growers reported that they would have 360,250 pounds. The great majority of these growers are very enthusiastic on co-operative marketing for pecans. The meeting will be in the interest of a Sapiro co-operative marketing organization." It was announced that Mr. Sapiro would be represented by Victor Victor, of New York. On the announced program were the names of Charles J. Bland, consulting specialist in marketing, Department of Agriculture, Washington, D. C., A. W. McKay, chief of the Bureau of Agricultural Economics, Washington, D. C., and L. M. Rhodes, manager of the Florida State Bureau of Marketing.

The Albany, Ga., Herald of Sept. 8th, contains this account of the meeting:

"In a meeting marked by several clashes with representatives of the National Pecan Growers Exchange, the promoters of the Southern Pecan Growers Exchange decided yesterday afternoon to go ahead with their organization and to begin signing contracts at an early date.

"Under the plans agreed upon, the new exchange will start with a one year contract, which shall be binding on the signers if 250,000 pounds of pecans shall be pledged by October 1. Victor Victor, of New York, representing Aaron Sapiro, the noted co-operative marketing expert and attorney, submitted a tentative contract, but stated that it would have to go to Mr. Sapiro for approval before it could be accepted. As soon as Mr. Sapiro has approved the contract and returned it, which is expected to be about ten days, another meeting will be held at Albany by the Southern Pecan Growers Exchange for acceptance of the contract. Details of this meeting will be announced later.

"It is proposed by the new exchange to launch a campaign next spring for a sign-up of 1,000,000 pounds of pecans on a five year contract. July 1 will be the date by which this minimum must be signed to make the new contract binding. It was stated yesterday that the reason for starting with a short term contract was that the new exchange is willing to prove to the growers what it can do before asking them to sign a long contract. So the future of the new co-op will depend largely on the effectiveness of its work in handling this fall's crop of pecans, which test, the promoters stated, they are willing to accept.

"The principal speakers at yesterday's meeting were Chas. J. Bland, of Washington, consulting specialist in marketing of the United States Department of Agriculture, and C. A. Reed, nut culturist of the Depart-

an extent that finally he may place on the market a nut that will have a soft shell and will be easily handled. The next thing he wants is a machine that will crack the nuts, and make it possible to place the meats on the market in greater quantities and with more rapidity.

"It's not a farm down East that I want," says Mr. Mosnat, "but right in Iowa." Horatio Barnes, of the Creston Advertiser, is some nutty, too. He tells of selling 500 bushels of Missouri giant hickory nuts.

ment of Agriculture. Mr. Bland spoke at length of the giant co-ops in California, particularly the almond and walnut growers' exchange. He told how they operated, and how they had increased not only the output of these products, but the returns to the growers as well. He recommended a five-year contract, such as is used by the almond growers of California. Mr. Bland outlined the method of advances and the plan of financing those crops how the executive control is exercised and other details of great interest that were followed closely.

Mr. Reed spoke more of cultural methods, the work with which he is most familiar, much of which he has done in this immediate section.

The experts were given a rising vote of thanks for their messages.

Following the set speeches, an effort was made by friends of the National Pecan Growers Exchange to put W. P. Bullard, president and general manager of that organization up for a speech. R. B. Small, of Macon, chairman of the temporary organization of the Southern Pecan Growers Exchange, objected to Mr. Bullard's speaking, declaring that the National president had tried to break up the meeting of the Southern, asserting that he had "packed" the room with his own adherents, that he had tried to bring pressure to bear to prevent the government's representatives from appearing, and that some of them actually did not appear. He said that United States senators from several states had appeared at the Department of Agriculture in Washington to try to prevent Mr. Bland and other government men from coming to Albany.

"It was finally agreed that Mr. Bullard should be heard from, but that he should confine his remarks strictly to co-operative marketing as a principle without reference either to his own organization or to the proposed new one. During the course of Mr. Bullard's remarks, he was interrupted twice by Harry U. Jackson, of Bacon, one of the promoters of the new organization. Mr. Jackson contended that Mr. Bullard was taking advantage of a meeting called by the Southern to promote the interests of the National Exchange, and that he was assailing the proposed new organization. There were several warm exchanges between Messrs. Bullard and Jackson, but Mr. Bullard was finally allowed to conclude his remarks. There were other heated moments when members of the National fired questions at Chairman Small, when the latter was attempting to refuse Mr. Bullard the floor. The meeting was finally completed, however, and quiet prevailed at the end of the session."

Cause of Pecan Drop

Hammond, La., Aug. 13—Inquiries are coming in from various parts of the state about the cause of nuts dropping from pecan trees. Specimens received indicate lack of pollination and scab injury. This is in a great measure due to excessive rains in the spring and also throughout the summer. Prospects are therefore for only a fair yield.

There is a lively interest in pecan orchard planting throughout the state of Louisiana and especially in the southern part. Good reports are being received about the performance of the Success variety, preferred to Stuart.

Our Hammond sub-station will have pecan

investigations as one of its projects. Other investigations started are with strawberries, Muscadine grapes, Satsuma oranges, blackberries and orchard grasses. Prospects of crops are bright.

B. SZYMONIAK
Horticulturist

Georgia Opportunities Unsurpassed

Editor American Nut Journal:

Replying to your letter of recent date inquiring about my interest in pecan growing, I take pleasure in giving you a few of the reasons for this interest.

For several years I have been watching the progress of pecan growing and as I have made frequent visits to Georgia for some years past I have become more and more impressed with the possibilities of the pecan in Southwest Georgia. About five years ago, while on a visit at the home of Mr. Jeff A. Taylor in Marion county near Buena Vista, Georgia, I discussed the subject with Mr. Taylor and strongly advised him to begin planting trees on his plantation. His place, Hollywood Plantation, seemed to me to be well adapted to this purpose. Among other things that impressed me that the trees would do well there was the fact that many large hickory trees then growing were doing well. It was not until last year, however, that Mr. Taylor became actively interested in the work of growing pecans and got the Hollywood pecan grove well under way. I have now in the Hollywood pecan grove 2400 Stewart and Schley trees. After investigation it was decided to limit the grove to these varieties.

A number of considerations convinced me that a pecan grove will prove profitable in that section of Georgia. At the present time there are thousands of improved pecan trees of bearing age in that part of the state and thousands of additional trees are being planted every year. So far as I have been able to observe nothing but improved varieties are being planted. Facilities for handling, grading and marketing the nuts are ready at hand. It is by no means a new product and a market already exists for the nuts. Probably the principal objection to pecans is that it takes a long time for the trees to come into bearing; however, this objection is offset by the fact that the trees live and continue to bear for a great many years.

I speak with more confidence about the pecan in Georgia for the reason that I have had an opportunity to observe conditions in this country recently from California to Florida and within recent years I have traveled through Continental Europe and the Far East as well as in Northern Africa, and, with this opportunity to see, it is my opinion that pecan growing in Georgia, especially Southwest Georgia, present opportunities that are unsurpassed. Of course, it is necessary, for profitable pecan growing, to plant only the best varieties of nuts and then give the trees careful attention. A neglected pecan grove will in my opinion prove a disappointment.

F. G. COTTON.

New Orleans, La.

J. O. Anderson, West Point, Ga., is preparing for a strong demand for nursery-grown pecan trees.

AMERICAN NUT JOURNAL, the Official Journal, three years for \$5.00; twelve months, \$2.00; single copy 20c.

National Pecan Growers Exchange Conducts Lively Campaign

An unusual amount of circular matter relative to the National Pecan Growers Exchange has been sent out from the office of that organization recently. One of these announcements is as follows:

The National Pecan Growers Exchange is the child of the National Nut Growers Association and the Georgia-Florida Pecan Growers Association, being an out-growth of a joint committee appointed at their annual conventions; and its work has been approved by these two bodies at their annual conventions. A few facts respecting this National Exchange are briefly told as follows: National Pecan Exchange has operated successfully since the fall of 1918 and has hundreds of satisfied customers all over Georgia, Alabama and Florida. It began in a small way on account of small production and a surprisingly increasing demand at fancy prices which always keeps growers out of any co-operative undertaking to market any kind of produce.

National Exchange is a purely co-operative non-stock, non-profit marketing association patterned after the successful California Walnut and Almond Growers Associations. The management visited California and studied all their successful marketing associations, and ours is the California plan not only in theory but in actual practice.

National Exchange Membership list includes the names of many of the oldest and best known growers in the United States. The president of both the National Nut (Pecan) Growing Association and the Georgia-Florida Pecan Growers Association and many of the past presidents of both these associations are members of this National Exchange.

National Exchange Members are admitted under the five year contract plan advocated by Mr. Aaron Sapiro. Equal privileges to all; special privileges to none.

Sales Agencies in all the leading nut markets of the country and some in foreign countries have been established by this National Exchange. Our registered Brands are now known to thousands of distributing agencies in the country. We are shipping largely to Canada and are planning to open up the foreign trade of the world on a scale that will relieve home markets when production becomes large; but we must have the co-operation of the growers.

Members are afforded information on cultural problems that is oftentimes invaluable. National Exchange is an organization of service to pecan growers.

A handsome building was erected last year—the finest papershell nut handling plant in the world. This required an investment of \$40,000.00 and is for the exclusive use of the National in preparing and handling nuts for the market. It has facilities for handling a carload per day and can afford marketing opportunities for the whole of Georgia, Florida and Alabama. The National Exchange will establish local plants all over the pecan belt as soon as production in the several localities will justify.

The National Exchange cordially invites inspection of its property by growers and others; and solicits the correspondence and patronage of pecan growers all over the United States. If you have not received copy of Marketing Agreement then write for it.

NATIONAL PECAN GROWERS EXCHANGE.

Wm. P. Bullard, President-Gen. Mgr.

A circular just at hand cites expressions by prominent pecan growers in behalf of the National Pecan Growers Exchange:

"I have been marketing my crop of pecans through the National Pecan Growers Exchange for the past two years—will do so again this year—and at no time and in no instance have I found anything to criticize. Results have been eminently satisfactory."—A Clarke Snedeker, Blackshear, Ga.

"I have read your circular of recent date with much interest. It is well written and I congratulate you heartily on the same. I am astounded to know that there is such a disposition on the part of pecan growers

to patronize speculative buyers and thus militate against the interest of the Exchange. I thought that when I connected with this body of men that they were people of a superior mould and sounder judgment than the ordinary crowd and would certainly rally to building up the Exchange. Of course, I know that my little contribution means nothing; but at the same time I do know that the co-operative method of putting sales across as is contemplated by the Exchange is the only way by which pecan growers can permanently and continually hope to secure fair prices for their product. You are on the right road and I predict great and permanent success." Judge U. V. Whipple, Cordele, Ga.

"I have just received your circular letter to Pecan Nut Growers. I fully agree with you in regard to the benefit to be derived from co-operating with you in your work of disposing of the pecan crop through your Exchange. I think it very necessary that the selling should be controlled through the Exchange, for if many of the small growers sell to outside parties the control of the selling end is, to a measure, lost.

"I have been much pleased at the manner in which you have handled the nuts during the existence of the Exchange, and I was glad to sign your agreement to allow you to handle the coming season the nuts grown by me. It is my opinion that it is to the advantage of all nut growers to sign up and sell through the National Pecan Growers Exchange, both the large and small growers."

F. F. PUTNEY,

President Georgia National Bank, of Albany.

"We are enclosing herewith for the Dixie Pecan Orchards Company, the crop agreement properly signed. We have something like 2,000 acres of pecan trees mostly bearing.

"We are certainly convinced that co-operative marketing is a great success and is the salvation of the enterprise. The National Pecan Growers Exchange has heretofore sold our crops and we are certain that you sold them to the very best advantage and realized more than we could have realized in any other way for our crops. It is our opinion that the Exchange is on better footing now than ever it was before and we have no doubt of its success."

THE DIXIE PECAN ORCHARD COMPANY,
Elijah T. Wood, Pres.

President Bullard announces that the important Taylor interests of the Albany district have signed up with the National Exchange and that Harold B. Taylor will become the assistant sales manager of the Exchange.

On September 1st President Bullard issued a four-page circular entitled "False Prophets," the first and last paragraphs of which are as follows:

Pecan Growers in this vicinity have recently been hearing something of the possibility of another pecan co-operative marketing association not connected with the National and consequently necessarily in competition therewith. The propaganda is going out that two, and in fact more than two, or even several co-operative selling associations may be advisable; but men experienced in co-operative marketing say there is not room for two co-operative associations in the same industry; and that more than one marketing association will be confusing to the growers and enable the trade to take quick advantage of the situation.

We understand from authorized published statements that one of the main movers in this contemplated new pecan co-op does not intend to market through it the nuts of his own growers association but on the contrary intends to market independently as heretofore. No one can become a member of or have any voice whatever in the affairs of this National who does not sign one of our Marketing Agreements which provides an enforceable penalty for all nuts that the member may sell outside the Exchange in violation of the Agreement.

Winter Injury to Pecans

During the present summer many reports have come to the Georgia Experiment Station that numbers of young pecan trees were dying. In most cases the trees started into the growth and appeared perfectly normal for a time, then the leaves turned yellow, growth ceased, and the tree died to the surface of the soil.

If examined when the leaves first began to show the unhealthy color, the sap-wood near the base of the tree was found to be dead and dark colored. The sap-wood in this region soon develops a peculiar odor which has suggested the name, "Sour Sap," by which the disease is generally known among growers. The bark over this region soon dies, and, if the injury extends around the tree, the underlying tissues dry out and fail to transport water and plant food to the upper part of the tree.

Injured trees are often attacked by bark beetles that bore small holes into the bark and sap-wood. Growers often attribute the death of the trees to the work of this insect. The bark beetle only attacks trees that are already in a dying condition.

The injury is in some way produced by cold. It is generally thought the sun shining on the trunk while the tree is frozen causes injury to the tender cambium tissue between the bark and the wood. Such injury occurs frequently to peach and pecan trees in this state. In pecans it is usually found only in young trees, before the sixth year. After this time the bark becomes thicker and more corky, and seems to protect the trunk from injury.

Many growers now practice wrapping the trunks of young trees with sacks, grass, or other protecting materials and have succeeded in saving the trees.

After a tree is once injured there is little hope of saving it. The best thing to do is cut the tree off near the surface of the soil. The stump will soon send up new sprouts. Remove all but one so that this one will get all the nourishment possible, and it will be large enough to bud the following summer. The old root system will push the bud into bearing two or three years earlier than a bud on a young seedling.

B. B. HIGGINS,
Botanist, Ga. Exp. Sta.

Seeding Black Walnuts

Writing to H. R. Mosnat, Chicago, under recent date, Dr. Robert T. Morris, New York, says:

"I note in your letter the statement that you can make hickory nuts grow from seed easier than black walnuts. Personally I have had no trouble at all with black walnuts. They were simply pressed into the ground in a row with a foot or the roller, allowing part of the shell to be exposed to sunlight, freezes, rain, dry weather and all of the things that make uneven expansion and contraction of the shell. I once planted some black walnuts two or three inches deep. Some of them came up in the first year, more of them came up in the second year and several came up in the third year, unless I was mistaken about those which may have really made a start late in the second year. Planted on top of the ground and merely pressed in, practically every one will start within two weeks after planting, provided that the seed is good and that the nuts have been kept stratified or moist enough during the winter."

Mexican Pecan Conditions

M. M. Lindheim & Co., of Laredo, Tex., discussing the Mexican pecan crop conditions says under date of August 6:

"In the Northeastern States of Nuevo Leon and Coahuila the pecan groves are reported as 25 per cent of normal and it is only the Montemorelos, Linarez and Villa Garcia hard shell groves that bring the percentage this high, since the soft shell groves of Bustamante and Monclova will not produce 15 per cent of last season. A plague of caterpillars invaded these groves and stripped the trees of their leaves. Shortly thereafter a small cyclone passed and blew from the bare trees the unprotected nuts. This is by far the worst condition in many years.

"The report of conditions from the State of San Luis Potosi is that this season's crop will be considerably less than last year when one carload was exported, the balance of the crop being consumed locally. As this section produces a semi-soft shell nut, slightly less valuable than that of Bustamante and Monclova (although considerably smaller), the nut is in demand. The Rio Verde and San Luis Potosi crops are 71 per cent of normal while Matuhuala is 68 per cent.

"In Jalisco, from ten to twelve carloads are reported as being possible export production. Last season not a single carload was exported. These pecans are mostly from Amacuaca where the crop is reported to be about 86 per cent of normal. These are the hard shell jumbos.

"A normal yield is reported in the State of Hidalgo. These tiny pecans were exported in considerable quantity last year. Atotonilco el Grande reports good conditions. From the States of Morelia, Michoacan and Oaxaca a production of 77 per cent is reported, but these pecans are seldom exported being irregular in form and hard shell."

Mr. James S. McGlennon,
Pres. North. Nut Growers Assn.

Dear Sir:—I have read your letter in June issue of the American Nut Journal, and what you say in regard to Pomeroy English walnut orchard at Lockport, N. Y., whose apparent success speaks well for the possibilities of English walnut culture on an extensive scale in various sections of the North and East.

Along with this I would like to call your especial attention to an article by D. H. Hulseman, Lakeside, Wash., in the January, 1923, issue of the American Nut Journal, in which Mr. Hulseman gives us a very optimistic report on English walnut culture. Does this not look encouraging to enthusiasts along this line? I ask you to give this matter further attention and consideration. Surely we have enough collective data at this time to convince any person of the profitableness and practicability of an English walnut orchard on the South shore of Lake Ontario and the middle Atlantic seaboard.

Hoping that you will give this matter due consideration, and expecting to hear from you in regard to it, I am,

CHAS. O. HENNINGER

Mr. Chas. O. Henninger,
Indianapolis, Ind.

Dear Sir:—I have only just returned from my Pecan properties in South-west Georgia, which accounts for this belated acknowledgment of your esteemed favor of the 5th. I remember the article you refer to, very well indeed, and I certainly do concur in your opinion that there is ample "collective data at this time to convince any reasonable and fair-minded person of the profitableness and practicability of an English Walnut Orchard on the South Shore of Lake Ontario and the middle Atlantic Seaboard."

I am sending your letter to our Secretary, Dr. Deming, with the request that he arrange to have it given due publicity.

JAMES S. MCGLENNON

Curly Grain Black Walnut

In his recent address in Charleston, West Va., Dr. Robert T. Morris referred to a report of a curly grain black walnut tree recently sold in Boone County, W. Va., for \$4,700. H. R. Mosnat, Chicago, who is particularly interested in curly grain walnut, wrote to the editor of the Charleston Gazette for information regarding the tree in question and received the following reply:

The West Virginia Department of Agriculture says that the tree you speak of was cut in 1885 and that it sold for considerably less than the amount you quote, which is probably what some product, manufactured from the wood, brought.

It is stated by the Department that the finest walnut tree in the state is not worth \$600 at the outside. The curly black walnut cannot be told by its outward appearance. They are said to be merely a freak of nature, but are sometimes found in about the same proportion to straight grained trees that curly maple is found.

The report you have is probably a misquotation of a lecture recently delivered here by Dr. Robert T. Morris, a nut culturist of New York.

Just mention AMERICAN NUT JOURNAL.

What is an American Name?

H. R. Mosnat, Chicago, Ill., has a page article on the black walnut, illustrated, in the August 11th issue of the Dearborn Independent, Henry Ford's paper which in the same issue editorially complains that opposition to prohibition in New York is closely allied to racial, religious and political interests and remarks that it doubts that among those opposed to prohibition there could be found one American name. This draws the fire of the Chicago Daily Tribune which asks: "What is an American name in Mr. Ford's opinion?" The Tribune says:

Is "Theodore Roosevelt" American or Holland Dutch? Is "Bernard Baruch" American or Spanish Jew? Is "Adolphe Valery Coco," the Louisiana official who obtained some fame in the Mer Rouge Ku Klux cases, American or French or Spanish or Portuguese? Is "Mr. Klingenschmidt," formerly vice president of the Ford company, American or German? Is "Eddie Rickenbacker," America's ace of aces in the great war, American or German?

Read through the list of special writers in Mr. Ford's own paper: A. R. Pinch, Paul Bowerman, William McGarry, Earl Christmas, Thomas J. Malone. H. R. Mosnat. Are those American names?

TEXAS PECAN NURSERY

R. W. FAIR and W. V. HENSON, Owners

ARP, (Smith County,) TEXAS

The World's Largest Pecan Nursery

GROWERS of the BEST ROOTED and BEST DEVELOPED,
BUDDED and GRAFTED PECAN TREES GROWN.
90 to 100% LIVE and GROW, IF CARED FOR.



LOOK WHAT ROOTS!

We grow roots on our trees like the ones shown on left of picture. **This Root System** enables our Pecan Trees to reach out in all directions and gather the **Necessary Moisture and Plant Food** to make thrifty bearing trees.

Haven't the trees you have been buying had roots like the ones shown on the right of picture? **Did they Live? Did They Give Satisfaction?**

The trees you set are the foundation to your grove or your investment. Can you afford not to buy the Best Rooted, Best Developed and Best Blooded Trees grown?

Our Pecan Trees are Better Acclimated to all states west of the Mississippi River, than any trees you can find, because they are grown right in the middle of the Pecan Growing States.

Our 10 Varieties have been selected to meet the needs of the above territory.



The Root System
We Grow

The kind of Roots
Usually Grown

READ WHAT ONE OF OUR BIG CUSTOMERS THINKS OF OUR TREES

Shreveport, La., June 28, 1923.

Texas Pecan Nursery, Arp, Texas.

Gentlemen: The Pecan Trees purchased from you had a perfect root system, and practically every one put out the following spring. I consider your trees the **BEST PLANTING STOCK I EVER SAW**. My business relations with your firm has been perfectly satisfactory in every respect, having bought something like \$15,000.00 worth of Pecan Trees from you in the last two years. Hoping your business continues to grow, I am as ever,

Yours respectfully,
G. T. SHAW, (Planter).

We have had to turn down orders for thousands and thousands of Pecan Trees every season, on account of the great demand our wonderful Root System has created.

Write for our 56 page booklet on "How To Grow Paper Shell Pecans," and book your orders now while we can furnish what you want. Don't wait and be disappointed.

Texas Pecan Nursery,

R. W. FAIR, Manager
ARP, TEXAS

American Nut Journal

COVERING NUT CULTURE

NORTH—SOUTH—EAST—WEST

AMERICAN FRUITS PUBLISHING CO., INC.
59 State Street - - - Rochester, N. Y.

RALPH T. OLCOTT, Editor and Manager

Official Journal Northern Nut Growers' Assn

Official Journal National Nut Growers' Assn

SUBSCRIPTION RATES

One Year, in advance.....\$2.00
Canada and Abroad..... 2.50
Single Copy20

ADVERTISING RATE

Per column inch.....\$2.80
Forms Close 10th of each month

ROCHESTER, N. Y. SEPT., 1923

NUT ASSOCIATIONS

California Almond Growers' Exchange—
President, G. W. Pierce; manager, T. C.
Tucker, 311 California St., San Francisco.

California Walnut Growers' Association—
President, C. C. Teague; secretary, W. T.
Webber; manager, C. Thorpe, 1745 East
Seventh St., Los Angeles, Cal.

Central Alabama Pecan Growers Associa-
tion—President, C. Kirkpatrick, Selma, Ala.;
secy-treas., Morgan Richards, Selma, Ala.

Georgia-Florida Pecan Growers Associa-
tion—President, A. C. Snedeker, Black-
shear, Ga.; vice-pres., H. K. Miller; sec'y-
treas., J. S. Wight, Cairo, Ga.

National Pecan Growers Association—
Pres., Charles A. Simpson, Monticello, Fla.;
vice-pres., J. M. Patterson, Putney, Ga.; and
E. C. Butterfield, Winona, Tex.; secy., J.
Lloyd Abbot, Spring Hill, Ala.; treas., J.
Slaters Wight, Cairo, Ga. 1923 meeting,
Jacksonville, Fla., Oct. 2-4, 1923.

National Pecan Growers' Exchange—
President and manager, William P. Bullard,
Albany, Ga.; vice-pres., J. B. Wight; secy-
treas., A. D. Galt.

Northern Nut Growers' Association—
President, James S. McGlennon, Rochester,
N. Y.; vice-pres., J. F. Jones, Lancaster,
Pa.; treas., Willard G. Bixby, 32 Grand Ave.,
Baldwin, N. Y.; secy., Dr. W. C. Deming,
983 Main St., Hartford, Conn. 1923 conven-
tion, Washington, D. C., Sept. 26-28.

Oklahoma Pecan Growers Association—
President, O. K. Darden, Ardmore; secy-
treas., C. E. Ringer.

Oregon Walnut Association Co-operative
President, F. W. Meyer, Dundee, Ore.; Man-
ager, W. H. Bentley, Dundee, Ore.

Southern Pecan Exchange—R. B. Small,
Macon, Ga., temporary chairman; B. W.
Stone, Thomasville, Ga., membership com-
mittee; J. R. Drake, Putney, Ga., secy-treas.

Southeast Georgia Pecan Association—
President, Dr. W. H. Born; vice-pres., Col.
G. H. Harris; secy., J. H. Girardeau, McRae,
Ga.; treas., E. F. McRae.

Texas Pecan Growers' Association—Presi-
dent, H. G. Lucas, Brownwood; vice-pres.,
John P. Lee, San Angelo; Secretary, Oscar
Gray, Waxahachie.

Western Nut Growers' Association—Presi-
dent, Ferd Groner, Hillsboro, Ore.; secy-
treas., C. E. Schuster, Corvallis, Ore.

The Hemet, California, Walnut Growers
Association is constructing a packing house
at a cost of \$25,000.

In the first line of the last paragraph of
the article, "As to Growth of Hybrids," in
August American Nut Journal, the clause
"In regard to Mr. Lewis' report," should
read "Mr. Jones' report."

The Proceedings of the Third Annual
Meeting of the Texas Pecan Growers Asso-
ciation, held at Brownwood, May 28-30, 1923,
have been issued in pamphlet form, consti-
tuting a valuable addition to pecan litera-
ture. The Association is in a thriving con-
dition under the management of President
H. G. Lucas, Secretary Oscar S. Gray and
the other officers and directors.

Just mention AMERICAN NUT JOURNAL.

AN ENORMOUS POWER PLANT

Institution: That which is instituted or
established.—Webster's Dictionary.

There is described, somewhat in detail,
in this issue of the Journal an institution
which anyone with a little means may build
in a few years, an institution which should
be a steady revenue producer for one hun-
dred to two hundred years.

This institution can be instituted—estab-
lished—in ten to fifteen years' time, at
which period a revenue therefrom will be
attained up to \$1000 to \$2500 or \$2000 to
\$5000 or \$4000 to \$10,000 per year, (accord-
ing to the size of the establishment) and
maintained for one or two centuries!

Are you interested?

Most institutions, certainly those of clay
or stone or timber, require a land setting—
an acreage upon which to stand. So does
this one. According as the acreage allot-
ment is five, ten or twenty, the revenue
named can be as stated above, in perpetuity.

Most institutions deserted by man and
with doors locked cease to function—reve-
nue stops at once.

In the case of the one under consideration,
operation is largely automatic. The gates
may be locked and the establishment des-
erted for considerable periods without
stopping production. The power plant
which goes with the land at the time of
purchase (as good measure) is the most
wonderful in existence. It is not made by
man, though man may greatly increase its
efficiency. It is not affected by strikes,
political changes, rust, corrosion, world up-
heavals at distant points, tariff, lack of fuel,
transportation, defective bearings, great
deterioration, fire, lightning, flood or storm.
So far as the power plant is concerned, it is
practically indestructible, remarkably re-
juvenescent—a wonderful motive force.

A plant of this kind can be purchased for
a few hundred dollars.

Like other power plants this one needs
attention, but its care requires the mini-
mum effort; work of a pleasant, healthy,
outdoor, periodic, deliberate character.
Probably no power plant of man's construc-
tion will last two hundred years. Instances
of the power plant we have under considera-
tion indicate continuous operation for four
hundred years!

If the reader is still interested, let him
turn to the article in this issue on the plant-
ing and care of a pecan orchard.

Such an institution affords the pleasant
option to the owner of establishing and op-
erating it himself from the outset with the
assistance of such easily and readily ac-
quired help as he may desire, making it his
vocation; or of establishing it and operating
it at the outset through an experienced
manager, while he pursues his regular occu-
pation, until such time as he desires to
retire and devote himself to enjoyment of
the delightful avocation of personally super-
intending this profitable institution.

Physicians, lawyers, merchants, editors,
manufacturers, bankers, farmers—men in

all walks of life are investing the small
amounts needed to establish for themselves,
their children and great grandchildren such
an institution whose continuance stretches
out for generations.

In outline, at least, and with certain modi-
fications, what has been said herein of the
pecan orchard is true of any nut tree or-
chard. And this accounts for the rapidly
increasing interest in Nut Culture, North,
South, East and West.

The columns of the American Nut Journal
regularly present the fascinating details at-
tending the development of this newest
branch of Horticulture. Commercial Nut
Culture has made big strides in the South-
ern states and on the Pacific Coast; it is in
the early stages in the Northern states.
Nature has provided enormous, powerful,
perpetual power plants which await direc-
tion.

CO-OPERATIVE PECAN MARKETING

Announcement of the formation of the
Southern Pecan Growers Exchange with
headquarters in Georgia immediately called
forth statements from the president and
manager of the National Pecan Growers
Exchange, Albany, Ga., through which
opinion was expressed that there was no
need for a pecan exchange other than the
National Pecan Growers Exchange.

This is directly contrary to official an-
nouncement by the Southern Pecan Grow-
ers Exchange which contains the following
paragraph:

Feeling the great need of such an organi-
zation, founded upon broad principles and
democratic ideas—one in which every mem-
ber will have a voice in its organization and
management—to meet the demands of the
growers a meeting was called in Albany,
Ga., July 4th, with a unanimity of mind,
viz.: to solve the problems of the hour, with
the result that the Southern Pecan Growers
Exchange was founded.

There is thus seen to be marked differ-
ence of opinion.

What should be kept in mind, of course,
is the welfare of the pecan industry. An
industry of such importance is far above
the personal ambitions of one or more men
from whatever point of view they may
argue. Southern pecan culture is advanc-
ing rapidly. The industry must and cer-
tainly will have the benefit of the com-
bined efforts of the best minds directly in-
terested in it. Present discussions will
clear the vision, bring out the facts and en-
able pecan growers generally to act intelli-
gently and in unison.

The very fact that prominent pecan
growers of the Southeast deemed it advis-
able to met to discuss co-operative market-
ing measures other than existing ones in-
dicates progressive thought and their belief
that such action is necessary.

As we stated in the last issue of the Jour-
nal, there ought to be one big pecan grow-
ers exchange in the Southeast. It may be
brought about in the future by combination
of exchanges and it may be best for the in-
dustry for a time to have the spur of com-
peting marketing organizations. It is all a
subject for serious consideration. We are
sure that what is best will be brought about.

Early last month shipments of filberts
from Sicily ended because the supply of
1922 crop was exhausted. The new crop
will probably not be in condition to ship be-
fore the middle of October.

Just mention AMERICAN NUT JOURNAL.

AWAKENING THE SLUMBERING PUBLIC

We have been particularly interested in the activities of H. R. Mosnat, Chicago, as giving an impetus for further development of nut culture in the northern states. Upon all sides there is agreement that black walnut should be planted quite generally. And Mr. Mosnat's specialty is black walnut. He believes he has three valuable varieties in Morris, Lewis and Glory. He is looking for other good varieties. He is not at all averse to working on varieties like the Thomas and Stabler. What he craves is action. When he can enlist the necessary capital by any fair means, we believe he will be heard from to an extent equal to that to which any person has gone or plans to go in nut culture in the northern states.

We believe Mr. Mosnat should be encouraged to the utmost. We believe others are of this opinion too. He is a student and an indefatigable worker. He is "nutty" all right, but along right lines. It requires just his characteristics to bring things to pass. We believe he will progress on safe lines.

Dr. Robert T. Morris says of Mr. Mosnat and his activities:

"Any man who will wake up the slumbering public on this subject will not only have more business than he could care for himself, but it would increase the business for all the others. It is merely a question of getting the great public on the move in this matter. The values are all there, for the promoter of the idea and for the farmer and the lumberman; but a man like Mr. Mosnat will have placed these values upon quartz rock because the idea is new."

Now here is another far-seeing individual working on similar lines.

Perry E. Tichenor, Evansville, Ind., writes to Dr. W. C. Deming, secretary of the Northern Nut Growers Association:

"I have a northern pecan and black walnut nursery in Spencer county, this state, where we are making the nine hardy pecans and four black walnuts absolutely correct and true to name.

"I have in view an estate of 1600 acres of fine silt loam between the Ohio and Wabash rivers—splendid corn land—and it is my ambition to find a man with money and brains and vision who will take this tract and set it with 32,000 of these pure bred pecans and black walnuts, and continue to grow corn between the rows until the trees become productive.

"I believe it is perfectly safe and sound and I have ventured to make the statement that this land will yield 7% net from corn while carrying the trees to a ten-year bearing age and that at the end of that period, they should produce conservatively a return of \$50 per acre net.

"I would appreciate an expression from you as to what you think of the practicability of this proposition."

Dr. Deming is very favorably disposed toward the proposition and believes it well worth serious consideration.

Nut Grafting Work in Missouri

Writing of the nut grafting work at the Missouri College of Agriculture, Columbia, Mo., Prof. T. J. Talbert of the dept. of horticulture says:

"On almost every farm, on the waste land along fence rows, up and down ravines and in other places untiled, one usually finds native black walnut and hickory.

"Our grafting investigational work has shown that these seedling walnuts may be grafted to improved sorts like the Stabler, Thomas, Kentucky and others which have thinner shells, large kernels, better flavor and quality and a higher market value. The seedling hickories are also grafted to improved varieties of hickory and pecan

which are superior to the seedlings in size of kernels, flavor, quality, and thinness of shell. The grafting operations do not impair the value of the walnut or hickory for use as lumber."

Iowa Orchard Yields

Des Moines, Ia., Sept. 5—Many home orchards of Iowa will harvest a very good crop, while some commercial orchards report prospects not so favorable, according to the August survey of the fruit and vegetable crops, issued by J. R. Herrick, secretary of the State Horticultural society. Most of the commercial orchards affected by insects or plant disease, were located in the western part of the state.

Indiana Nut Crop Large

Goshen, Ind., Sept. 3—Present indications are that the harvest of walnuts, hickory nuts and butternuts in northern Indiana will be larger than in several years past. With timber being cut off at a rapid rate, however, it is probable that within a comparatively few years all three varieties of nuts will be scarce throughout this part of the state.

Heads Peanut Growers

Thomasville, Ga., Sept. 3—Hugh J. Moore has been chosen chairman of the Thomas County Peanut Growers' Association. Fair prices are expected. The crop probably will be short.

Farmington, Ill., Sept. 4—Small crop of nuts of all kinds—say 30% of average crop. This is a grain and stock section. There are no new nut orchards. Mine is a private experimental plant, mostly two trees of a variety. I do not sell plants of any kind, but I will raise some grapes, pears, apples, persimmons and a few chestnuts for market.

BENJ. BUCKMAN.

President William P. Bullard, of the National Pecan Growers Exchange, Albany, Ga., is the secretary of the newly formed Georgia Council of Co-operative Marketing Associations. J. E. Conwell, of the Georgia Cotton Growers Association is chairman.

Practical Questions For Consideration

The following questions have been prepared by Secretary Deming for presentation to the Northern Nut Growers' Association in annual convention in Washington, D. C., September 26-28.

1. What can be done by the Association to interest business men in planting orchards of nut trees to corroborate our own confidence and experience that they can be made to produce profitable crops?
2. Just what varieties of nut trees shall we recommend for planting for profit, in what sections of the country and by what methods?
3. Just what results can we point to as evidence of our faith that nut trees can be made to produce profitable crops in those parts of our country to which our efforts are naturally limited?
4. Are we really learning anything under present conditions leading to the establishment of commercial nut culture in the northern states?
5. How can the business man and producer be brought into contact with the genius and experimenter and arrive at the point of action at which a nut orchard will evolve?
6. Is there anyone who will volunteer to assist the secretary, with time or money, in an attempt to reach the business man with inducements to plant nut orchards for production?
7. Will any expert in nut growing volunteer to advise business men who will undertake to make nut tree plantings for production, and agree to give the management of the planting general supervision?
8. Why should not the U. S. Dept. of Agriculture, with its staff of nut experts, consent to advise and supervise the planting of nut orchards in the North by business men for the commercial production of nuts?
9. Are we not ready now at Washington—with our list of named varieties of nuts suited to northern planting, and with our accredited list of nurserymen to supply the propagated trees, to endeavor earnestly, by advocating planting of nut orchards in the northern states (under conditions probably suitable), to map out a plan for directly interesting land owners, business men and producers, to establish nut orchards for profit on a commercial basis?
10. Are there five members of this Association brave enough to volunteer to consider these questions earnestly, present a plan of procedure and pledge their time and effort to start Commercial Nut Orcharding in the Northern United States?
11. Will the nut nurserymen inform the meeting what supply of grafted trees there will be to meet a rapidly growing demand?
12. Will the nut nurserymen also give us some account of the principal plantings of nut trees now in existence in the North and the results so far? Will any members having knowledge of any considerable nut plantings, possibly capable of producing results, or already producing, please tell us what they know?

ALL INTERESTS CO-OPERATING

ATENTION to the mutual interests in the Nut Industry is succinctly directed by Manager T. C. Tucker of the California Almond Growers Exchange: "We are a strictly co-operative organization, including Grower, Broker, Wholesaler and Retailer."

This may be said also of organized effort in the production and distribution of Walnuts and Pecans, each of which is represented in Associations.

It is because of this co-operative feature that the American Nut Journal combines the news of the Nut Industry in the fields of Production and Distribution. Its Market and Crop Reports will be of increasing value.

It is of prime importance that the market shall be supplied; a supply is the basis upon which a market exists.

It is also of prime importance that a market be created and maintained; distribution of the product is what makes the industry.

The Journal desires to co-operate heartily with producer and distributor, and to that end welcomes frequent communications by way of comment on current events, personal mention, trade news and suggestions. It is the logical medium for interchange of trade comment and the recording of trade activities.

A STUDY OF VARIATIONS IN PECANS

By F. R. Brison, County Agent, San Saba County

FEW plants show such a wide variability as the pecan when it is reproduced from seed. This is so great as effectually to prevent the propagation of improved varieties by seed, though it offers a good opportunity for the introduction of new varieties by selection. New varieties thus obtained can be perpetuated in definitely by budding and grafting. From the breeders' point of view this great diversity of the sexual progeny of pecan trees is very fortunate, as it is only through the occurrence of variations in any plant that further improvement within that species is possible.

THE PECAN CROP

Every section of the country has a crop or enterprise of which it is proud. The time is probably not very remote when Texas will boast as loudly of her pecan industry as she does now of her cotton, and Texas pecans will be as widely advertised as the walnuts of California. The pecan is indigenous only to certain parts of the southern United States and a small section of northern Mexico. Dean Kyle of the Texas A. and M. College declares that Texas is the ideal home of the pecan; and Texas alone has more native pecans than all the other states combined.

In 1919, 16,755,421 pound of pecans valued at \$3,698,233 were produced in Texas. Probably nowhere else in the world does nature, unaided by man, produce a crop ready for the market of as great money value. Within the last twenty years large areas have been planted to improved varieties of pecans in Georgia, Alabama, Mississippi, Florida, and Louisiana; and these states are now leading in the production of named varieties.

The pecan is monoecious; that is, it has two kinds of flowers on different parts of the same tree. It is very similar to the corn plant in this respect. The staminate flowers or catkins which correspond to the corn tassel are borne on wood of the preceding season's growth, while the pistillate flowers which correspond to the corn silk are borne on wood of the current season's growth. The pollen grains are carried from the catkins to the pistils by wind primarily and by gravity. Naturally then a high percentage of cross pollination will take place. It is believed that under the most favorable climate conditions, viable pollen grains may be carried a distance of three or four miles. Just as white and red corn if planted in adjoining rows or even fields slowly becomes crossed up, so the best pecans always stand the chance of being crossed up with all other pecans—good and poor—within a radius of three or four miles. And since there are more poor trees in native groves than good ones the chances of getting a poor cross are greater than the chances of getting a good one. The pecans produced by one tree are the result of the union of the sperm cells of pollen grains from many different trees with the egg cells of the mother tree. Consequently the result of each fertilization is apt to vary in one or more respects from the result of all other fertilizations, owing partially to the difference in the paternal influence. Remember though the cross does not affect the size and shape of the pecan, it effects only the embryo; and not until the pecan is planted and nuts are produced by the tree coming from it will the effect of the cross-fertilization be noticeable. The shell of a pecan is purely maternal tissue, and so similar are

all the nuts produced by a variety that trees, the variety name of which is not known, can be identified by the nuts they bear.

NEW VARIETIES

Self- or close-pollination of pecans is frequently recommended for producing seed pecans. It is no doubt a good practice but it does not insure an exact reproduction of the pecan planted because of the heterozygous, or crossed up, character of the pecan; it only increases the chances of getting a good tree from the seed planted. The pecan is slow in coming into bearing, requiring from five to twelve years from the time the nut is planted until the tree produced from it bears seed. Any attempt to produce a pure line of self-pollination will necessarily have to be extended over a very long series of years. Most of the so-called "improved" varieties of pecans were originally found growing wild and have been propagated by budding and grafting ever since.

On exhibit at the Horticultural Show of the A. and M. College of Texas in 1922, was a display of thirty-six distinct types of pecans, produced by thirty-six different trees that were grown from seed, all produced the same year by a single mother pecan tree, the original San Saba. In size of nuts there is a rather uniform gradation from those as large as pecans to those over two inches in length. No correlation between size of nut and thickness of shell is evident. Some of the larger nuts have very thin shells, while some of the smaller ones have extremely thick shells, and vice versa. There are marked differences between the varieties in flavor, proportion of kernel to shell, readiness with which kernel separates from shell, and habits of growth of the tree from which the nuts came.

Mr. E. E. Rislen, who planted the pecans and expected the progeny to be exact reproductions of the San Saba variety, convinced himself by this demonstration that propagation of pecans by seed is not a re-

liable method; and he is now perpetuating his standard varieties by budding and grafting. He continued his pecan breeding work, however, and has had remarkable success along this line. To him falls the enviable honor of having introduced pecans that will be famous for generations to come—such pecans as the Texas Prolific, Western Schley, Liberty Bond, San Saba Improved, Banquet, Pecan Supreme, and others equally as promising.

Thus it will be seen that the propagation and improvement of pecans is governed by the very same principles which govern the apple, pear, and other fruit and nut trees. There is this one difference, however; the development of the pecan is so recent that there still remains greater opportunity of finding superior seedlings than is the case with the fruits and nuts which have been cultivated by man.

English Walnuts in the North

Editor American Nut Journal:

I hope that the Northern Nut Growers Association will take some definite actions in regard to giving publicity to English walnut culture in the regions of south shore of Lake Ontario and the Middle Atlantic seaboard. We have at this time some very fine hardy varieties of walnuts which should succeed fairly well in these sections and should be given an extensive trial.

In other sections of the North and East climatic conditions are not so favorable to English walnut culture; but it seems that varieties are now being found that are hardy enough for many sections of the North. These varieties are standing temperatures of 25 to 30 degrees below zero—a degree of hardiness required for this section of the North.

In conclusion, I would like to comment on the article of Sam H. James, "The Seven Virtues of the Perfect Pecan." This is surely a wonderful and instructive lesson, and could be applied to any branch of nut culture.

CHAS. O. HENNINGER.

Indianapolis, Ind.

Former President Linton to Address the Convention

Former President William S. Linton, Saginaw, Mich., writing to Secretary William C. Deming, says:

"The annual meeting of the Northern Nut Growers Association happens to be held in Washington, D. C., this year, during the same week of the convention of the National Tax Association, which is to be held at White Sulphur Springs, West Virginia, September 24-28 inclusive, to which Senator Penney and I have both been named as delegates by the Governor of Michigan, and we, of course, will be expected to at least answer roll call during the early days of the last-named gathering.

"The Senator and I had a conference today on the subject and came to this decision, viz: that with Mrs. Penney and Mrs. Linton we would motor to White Sulphur Springs, present our credentials and remain there for a day or two and then continuing on, will also undertake to be in attendance at the Nut Growers Association meeting on the 27th and 28th, certainly on the last-named day and both if possible.

"As requested, I will undertake to prepare a paper, choosing for a subject, if satisfactory to you all, the title "Roadside Planting

vs. Reforestation," as applied to nut-bearing trees.

"I appreciate the privilege and courtesy extended to me and confess I really would like to bring the last word and my conclusions down to date, and once more discuss the subject with our fellow members of "Planting Nut Trees and Bushes, Along the Highways," to show the immense area of fertile soil that can be thus covered, bringing about, as it certainly would and in fact as is being done today, the planting of more useful trees than has been accomplished in decades by all reforestation methods that many individuals and hundreds of associations have heretofore tried to work out to date.

"As you know, I have been diligently working along this particular line for many years, and from the experience and the information thereby obtained, it will be a pleasure for me to precisely present the facts as I understand them, and in a way that I hope may be considered by you and our colleagues in the work to be practical in form and suggestion.

"Thanking you for your consideration, and also for many courtesies extended in the past, as well as assuring you of my deep appreciation of all."

A Numbering System For Pecan Orchards

By F. C. Clapp, Eufaula, Ala.

IN all of the literature on pecan culture that has come under my observation, I have found no description of a real practical and economical numbering system for orchard trees; and yet I know of nothing of more importance to the man in the field who has charge of planting, replacements, upkeep, and gathering of the crop of nuts.

It is to this man in the field, who labors with a large ungainly map where the wind tears, where rain spatters and makes blotches where figures should be, where figures at the fold are undistinguishable and where present reserves of profanity are utterly inadequate, that this article may be of special interest. Personally I have labored, struggled and despaired with orchard maps in planting, replanting and care of the orchard till the necessity of a more workable system was forcibly thrust upon me. It is an apt saying that if a person knows the distance from the earth to the moon, that knowledge will be of some practical value to him at some time. In this case a knowledge of the French system of mapping in the World War furnished an inspiration.

Those of you who were in the artillery branch of the service in France, will recall that the whole battle front was accurately surveyed and the location of every point indicated accurately to the meter. Briefly, the system was as follows: An arbitrary point, I believe in the Atlantic Ocean somewhere, was chosen and distances computed in meters both North and East. The location of a church steeple might be indicated as 364,523—647,832 which would mean and could be figured on the map as being 364,523 meters North and 647,832 meters East of that point in the Atlantic Ocean. A modification of this system of accurately locating points works most admirably in designating, by number, the location of trees in an orchard.

On our plantation there are about 1,250 acres of pecan orchards divided into 15 different fields for which a separate chart is provided. Each field, row and tree is given a number. For example, take tree number 4-20-31. Number 4 is the field, number 20 the row and number 31 the tree on the row. In practice, in a young orchard, the system is of special value in replanting, but it is of great service in the care of trees requiring special attention. While pruning or going thru the orchard at any time, when any operation is seen to be required which cannot be done at that time, a note of it may be made and turned into the office for future use. When the time comes for that piece of work to be done, an order is given from the office to the field man to, let us say, bud to Stuart tree No. 12-27-13 which is a seedling tree. Without hesitation or loss of time or use or misuse or abuse of maps or charts, he goes to field 12, row 27 and tree 13 as located in the field markers. He performs the work, marks it completed, and returns the order slip to the office where the transaction is recorded.

At replanting time let us take a few typical orders for replants that were previously determined in the field and recorded in the office:

2-17-43 Sc.
6-14-72 St.
6-12-16 Mm.
8-43-27 Pa.
10- 6- 1 Al.
10-10-31 Van.

Trees of the proper variety and the cor-

rect number of each are secured from stock or the nursery, each field is visited, and as each tree is planted, it is checked on the order sheet as under 6-12-16 Mm, meaning that a Money Maker tree was planted for the sixteenth tree on the twelfth row in field six.

As for field markers, any system specially adapted to the conditions, may be used, but we have found under our conditions that a white number post placed at the tenth, twentieth, thirtieth, fortieth etc. tree on every tenth row of each field serves the purpose very nicely at a minimum expense. On each post is printed in large numbers, the numbers of the field, row and tree. The accompanying illustration shows very clearly how the system works out under field conditions. The top number -7- is the number of the field; the middle number -20- the row, and the lower number -30- the number of the tree on the row.

This numbering and recording system has been in use by us for two years under the

most difficult conditions and has proven satisfactory in every respect and it is to be hoped that it may prove to be of value to others who have not as yet worked out a satisfactory system of orchard markings and office records.

Illinois Conditions

Anna, Ill., Sept. 5—Trees in good condition but crop not more than 20% owing to heavy rains at blooming time. This applies to pecan, hickory and walnut, all of which are seedlings.

Not many new nut orchards in my locality. I have 100 budded and grafted pecan trees set spring of 1917, also have 50 black walnut of the Stabler and Thomas which have a few nuts on them at present. Quite a few people are beginning to take interest in nuts, especially the black walnut.

O. H. CASPER.

Aaron Corbitt announces that he will set 75 acres of his farm near Glory Ga. to pecans next winter.

AMERICAN NUT JOURNAL, the Official Journal, three years for \$5.00; twelve months, \$2.00; single copy 20c.

READ

What the Largest Shellers and Importers of
Nuts in the World Think of

The Woodson Nut Sheller

TELEPHONE FRANKLIN 4600

IMPORT DIVISION

CABLE ADDRESS "COSTA"



P. COSTA, PRESIDENT

United Fig & Date Company

SHELLERS—MANUFACTURERS

Nuts and Nut Products

320-332 NORTH LA SALLE ST
NORTH BANK CHICAGO RIVER & LA SALLE ST

Chicago

NEW YORK
OFFICE AND FACTORY
WATTS AND GREENWICH STS.

August 13th, 1923.

Mr. Robert E. Woodson,

St. Louis, Mo.

Dear Sir:—

With reference to your Pecan Shelling Machine, wish to advise that we have used a number of your machines since 1918, have found same very satisfactory, and to the best of our knowledge equal to, or better than any other machine built at the present time.

Yours very truly,

UNITED FIG & DATE COMPANY,

President.

PC:C

A Woodson machine will be demonstrated at the National Pecan Growers Association Convention, at Jacksonville, Florida, October 2-3-4, 1923.

ROBERT E. WOODSON

SOLE INVENTOR AND MANUFACTURER

3763 Forest Park Ave.,

St. Louis, Missouri

The American Nut Trade: Market and Crop Reports

THE PECAN

Government Crop Report

Pecan Condition August 1, 1923

The usually fine pecan condition existing on July 1 declined sharply during that month. By August 1 the crop had fallen 16 points in South Carolina and Mississippi, 15 in Arkansas, 14 in Oklahoma and Alabama, 13 in Texas, 9 in Louisiana, 8 in North Carolina, 6 in Georgia, and 4 in Florida.

The conditions on August 1 were reported at 83% of normal in Georgia and Florida, and 72% in Alabama, 70% in Illinois, 67% in North Carolina, 65% in South Carolina, 63% in Oklahoma, 62% in Mississippi and Louisiana, 53% in Texas and 50% in Arkansas.

The very poor crops in the West are due mainly to drought conditions.

Although the crop as a whole suffered a decline during July of about 12 points to 60.5% of a normal crop promised on August 1, the condition still remains above the July 1 figure of the years 1921 and 1922, which were reported at 56.3% and 53.4 respectively.

The effect of the August weather of this year is still to be determined and will be reflected in the report for September 1, to be issued about the 10th of that month. Comparisons with August 1 conditions in previous years can not be made as no inquiry has heretofore been made as to that date. The present August figure is considerably above the figure of 51.2% reported for September, 1921 and far above the very bad September 1 condition of 27.7% in 1922.

ALABAMA

Big Development in Alabama

Selma, Ala., Sept. 3—Pecan trees are in flourishing condition and have been well cultivated, but a cold snap in April caught some of the early buds and killed them. They put out again but failed to set a crop of nuts. This applies to Moneymaker, Mobile, Frotscher and Stuart. The Success and Pabst have set about 25% of a crop, but nuts still falling. Schleys set a good crop, but owing to continued rains since February have scabbed badly and are falling; about 20% of a crop of Schleys. Taken altogether the pecan crop in this section will not average over 20% of a normal crop.

A great number of young pecan groves have been planted this season, and are doing nicely. Possibly as many young trees were planted this year as there are trees already planted; large orders are being booked for fall plantings. Central Alabama in a few years will be the pecan belt of the state and the pecan crop will bring in more money to the farmers than ever the great cotton crop did in its palmy days.

The growers realize the possible magnitude of the pecan industry and are now organizing, co-operatively, to be able to sell nuts at a profit when the volume of nuts becomes too heavy for individual disposal. Sixty percent of the grove owners are members of the Central Ala. Pecan Growers Association, and this Association has affiliated with the National Pecan Growers Exchange of Albany, Ga. They realize the im-

portance of only one big exchange for handling pecans and have centered on the National which is already fully equipped for handling the nuts, and which gave such general satisfaction last year.

C. KIRKPATRICK.

To Plant 1200 Pecan Trees

Dr. Virgil Dark, Alexander City, Ala., recently purchased 10,000 peach trees and 1200 pecan trees for planting this fall on 100 acres. His idea is that the peach trees will grow off and get through with their production within a few years and that he will have one of the finest pecan groves in east Alabama. He has bought popular brands of both peach and pecan trees and expects to make this land worth several hundred dollars per acre in addition to bringing in handsome returns on the investment

A Twenty-year Proposition

Fowl River, Ala., Aug. 11—Trees look very well except that scab seems to be increasing. We note that the Stuarts are now showing quite a bit of this disease and we had hoped that this variety was immune. Indications are for a very heavy crop, the best crop in several years.

Several hundred acres have been planted recently but the growers are somewhat skeptical about the pecan and most of us now realize that in this country it is more of a 20-year proposition than a ten-year one as we once thought it was.

In this particular section the bulk of the trees are 13 years old and have done but little to pay for what has been spent on them. Once they prove they can show a commercial profit, planting will be resumed; but on never so large a scale as when the growers thought ten years was as long as they would have to wait.

Rosette has been largely overcome by intelligent feeding and incorporating of humus in the soil, but this scab has the growers scared as the amount of spraying necessary to beat it takes all thought of profit.

The cost of caring for groves is being materially reduced by less cultivation and the growing of cover crops.

A lot of spraying has to be done here to check the leaf case bearer, the bud worm, the aphid and other pests. In spite of the large crop outlook, a Philadelphia man has offered us 40c per lb for all sound nuts F. O. B. loading station.

A. J. HARKINS

Pres. Gulf Coast Produce Ex.,
Mobile, Ala.

In Bullock County, Ala.

Union Springs, Ala., Sept. 5—According to pecan growers of Bullock county, the third largest pecan producing county in the state, the yield this year will be only from 50 to 60 per cent of normal, due to excessive rains at the blooming period, which retard pollination. Then this led to the setting of about three-fourths of a normal crop.

The summer drop has been in progress for some weeks and this has lessened the yield still more. The losses from worms will be very light, almost negligible.

Last year the drop was caused by the drought. Growers say that any extreme dryness or wetness will cause shedding; also that any passage from one extreme to another will in a measure cause the same trouble. However, the nuts are said to be full size. New orchards never have made

as rapid a growth as during the present season.

The orchard of Col. H. J. Rosenthal, of Union Springs, was set in the spring of 1922. The best of the trees have made a four feet growth thus far this year, a very few have made five feet, but about three and a half feet will be a safe average. His orchard of some 600 trees composed of Stuart and Schley paper-shell pecans, is considered the best of the many young orchards in Bullock.

Bullock county has a number of expert budders of pecans and the budding season is almost at an end, as it lasts only as long as the bark will slip readily, which is at the period of greatest growth.

The largest shipper of pecans from Bullock last year was F. L. Pickett, who sold about 60,000 pounds.

60% at Eufaula, Ala.

Eufaula, Ala., Aug. 18—Condition of trees fine. Crop prospect about 60% of normal.

New nut orchards: Perhaps 200 acres in county.

CLIFF A. LOCKE.

LOUISIANA

Louisiana Pecan Percentages

Hammond, La., Sept. 6—In Southeast Louisiana pecan crop prospects are good—70 to 80%.

South and Southwest Louisiana reports indicate a fair crop—50 to 60%.

North Louisiana medium, 60 to 70%. The season has been favorable, although rainy during pollination.

Lively interest in pecan orchard planting is shown throughout Louisiana.

Five varieties of pecan trees, Schley, Stuart, Success, Pabst and Alley—ten trees of each—have been planted in the spring and all have made a satisfactory growth on The Fruit and Truck Experiment Station.

B. SZYMONIAK.

65% at Dodson, La.

Dodson, La., Sept. 3—Condition of pecan trees in this vicinity is normal, but the nut crop is only about 65 per cent of a normal crop. Too much rainfall in blossoming time and depredation by insects are cause of the short crop.

There are no orchards of any size being set out here; just a few trees here and there.

F. O. DAVIS

Web Worm Threatens Crop

Cloutierville, La., Aug. 30—Condition of pecan trees very good, due to plentiful rain in spring and early summer. Crop prospects good on wild nut trees; poor on Stuarts; fair on James; about 30 per cent on Moneymaker. Web worms are unusually active this year, threatening to destroy part of the pecan crop.

J. BACHELIER

Large Native Crop in Louisiana

Port Huron, La., Sept. 2—Nut trees very vigorous. Considerable rain and thorough cultivation inducing splendid growth. Large native seedlings will yield heavily. Orchard trees ranging from eight to fifteen years of age have no crop worth gathering. A scattered few Moneymaker trees only ones with fair crop. Schley trees badly infested with scab. Scab also showing on Pabst.

S. J. DURAND.

Just mention AMERICAN NUT JOURNAL

TEXAS

275 to 300 Carloads from Texas

Clyde, Tex., Sept. 6—From reports reaching me, within the last thirty days, the pecan crop of Texas promises to approach, approximately, 275 to 300 cars of 30,000 pounds each.

My estimate for last month was made with a guess that the nut case bearer would continue to make inroads as the season advanced. It now appears that this pest was effectually checked by natural insect enemies, so at this time but very few case bearers have survived the onslaught of these predacious enemies and the crop at this time promises to be more than my former estimate.

J. H. BURKETT.

Texas Pecan Crop Better Than Last Year

Dallas, Tex., Sept. 6—I have not had the opportunity to make observations, but I understand that the crop of pecans in this section is slightly under the average crop, although considerably better than last year's crop. It is reported that the case-bearer is rather plentiful, and has damaged the crop considerably.

I do not know of any new orchards having been planted in this immediate section.

I have planted over 200 trees on a farm in Eastern Texas during the past two seasons. They were Nursery trees and they are growing very nicely. They are of the following Eastern varieties: Schley, Stuart, Delmas, Success, and Moneymaker.

A. M. BILLINGS.

Pecans \$350 Per Mile

San Angelo, Texas, Aug. 20—Owners along the Concho rivers in Tom Green and other counties are contracting their 1923 pecan yield at from \$300 to \$350 a mile, which is above the average price. This denotes that the crop will be heavier than at first expected and barring pests will be of fine quality.

John P. Lee, Hereford breeder, and for many years owner of river land producing heavily of pecans, predicts that 25 cars of nuts will be shipped from San Angelo this fall. This will be better than one-half the normal crop of 45 cars.

Winona, Tex., Sept. 5—Practically all of Texas suffered from dry weather this year with but few exceptions. Crop prospects are spotted. Generally speaking the crop is fair for seedlings. Improved varieties vary also. Some seem to have a good crop of nuts while the majority have light crops. Quite a few young pecan trees are being planted in this section, but no large acreage.

E. C. BUTTERFIELD.

Just mention AMERICAN NUT JOURNAL

MONTICELLO NURSERY COMPANY,
MONTICELLO, FLA.

One of the oldest nurseries in the Gulf States. Winners of the prize for the best quality pecan in the world, in "The Best Pecan Contest" held at Bend, Texas, in 1921.

All of our pecan trees are budded and grafted with wood cut from bearing orchard trees. Quality and service of the best.

Trifoliata seedlings and all standard varieties of pecan trees.

WRITE for CATALOGUE and PRICES
We are buyers of all varieties of Pecan Nuts.

MONTICELLO NURSERY COMPANY, F. A. Mahan, Mgr.

Albany Pecan Nut Exchange, Albany, Georgia

Now booking orders all varieties paper shell pecans S. A. P. Mail us list of your requirements to-day, for fall delivery.

Planting Many Grafted Pecan Trees

Austin, Tex., Sept. 5—The wild pecan trees seem to have from 20% to 50% of a good crop. While half the families or less have each planted a few grafted trees, the crop from them is a small amount compared with the crop from the native wild trees.

I am a firm believer in the practice of keeping the ground clean under all pecan trees.

Many orchards of grafted trees are being planted. The number or acreage increases each year. Over Central Texas nearly all wild trees are growing along the streams, hence we have had the impression that they are not successful away from the streams. We are finding out this is not true.

Halbert and Moneymaker will be ripening the later half of September.

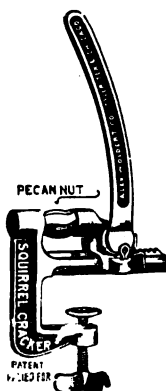
If you have never burned a pecan kernel borrow your wife's hat pin and stick a kernel on it and hold a match under it. In the early days the surveyors kept their chains and compasses busy all day and copied their work at night by the light of a few pecan kernels.

F. T. RAMSEY.

Heavy Crop at Coleman, Tex.

Coleman, Tex., Sept. 8—Pecan trees are in most thrifty condition for years and the crop of nuts the heaviest. Limbs are bending under the load of nuts already and nearly a month yet to grow and fill out before maturity. In some localities in this section of the state the grasshoppers after destroying much of the cotton crop took to the pecan trees along the stream and defoliated them and no doubt will stunt the nuts which are still clinging and will mature. The case bearer did little damage; in fact has been an advantage to my Halbert pecans which have a tendency to bear too heavily every year.

There is very little progress in my county in planting new orchards or extending old ones. I am replanting each year the miss-



Squirrel Nutcracker

BEST ON EARTH

Cracks the shell but not the kernel. Very simple; operates faster and better than any hand power nutcracker known.

Alex Woldert Co.,
TYLER, TEX.

BARGAIN For QUICK SALE

12 Acre Pecan Grove, located in Springdale Pecan Groves, about 11 miles from Jefferson County Court House, at Monticello, Florida, on the Thomasville Road, containing over 200 pecan trees, 50 citrus and other fruit trees and grape vines—many of the trees beginning to give returns. Improvements: Nice little cottage, nearly new, fully furnished for a man and his wife; porches and windows copper wire screened. Drilled well 165 feet deep, 3 H.P. Western Electric engine, double pump, pressure tank, hot and cold water in kitchen, and fully equipped bath room. 185 feet cemented tile drain; lots of space for growing kitchen garden truck. For price, etc., address,

JOHN W. KIRK,
134 Elm Avenue Mount Vernon, N. Y.

AN UNUSUAL OPPORTUNITY

To Purchase
ENGLISH WALNUT GROVE
In bearing. About 14 acres. Located in northwestern Pa.

EDWARD A. SELKIRK, Buffalo, N. Y.

ing places on 75 acres I started a few years ago, the earlies of which will begin to bear in one or two years more from the nuts planted; and recently I bought a small block of land in an adjoining county which is deep sand with clay foundation and known as "Shinery" land and I am convinced is the best pecan land in Texas, if not in the South. Nuts planted on such land will grow more rapidly and come into bearing earlier than any alluvial river bottom, the Mississippi not excepted. The trees are growing there to show for themselves. The people are finding out that this sandy post oak land is superior to bottom land and extensive orchards of 50 to 100 acres are being planted in the Halbert pecan nuts around Comanche, a nearby county.

H. A. HALBERT.

Trinity River Section 60%

Waxahachie, Tex., Sept. 3—I should estimate our condition about 60%. While our trees seem fairly well loaded to possibly a 75% crop, nuts are fully 20% undersized on account of dry weather that has also caused some shedding. This estimate applies only to this section of Texas, where principal production comes from Trinity river and immediate tributaries.

O. S. GRAY.

Texas Pecan Crop Varies

Tyler, Tex., Sept. 4—Condition of pecan trees in this section of Texas is good. The pecan crop will be about 25% normal. The crop in Texas this season is very spotted, being good at some points and a failure at others.

ALEX. WOLDERT CO.

D. S. Harris, Williamsburg, Va., finds that immersing the affected parts in water as hot as the flesh will bear without scalding is an effective means of relief for ivy poisoning.

A pecan shelling plant to be in operation in Waycross, Ga., this fall is planned, under an investment of \$25,000, by M. M. Monroe and others.

If it relates to nut culture it should be in the AMERICAN NUT JOURNAL. Please send it in.

THE WILCO PECAN CRACKER

Cracks 180 pecans per minute with maximum of halves and minimum of picking. BUILT to LAST, completely enclosed and safe from usual troubles and breakage.

Let us send you full details

The Wilco Machine Co.

3560 Chouteau Ave. St. Louis, Mo.

Manual of

WALNUT GRAFTING

The Biederman Method is fully described and illustrated. It is applicable to pecan, hickory and chestnut. Of special value in topworking, because it does away with use of ladders.

Price 75c per copy postpaid.

W. N. Y. PUBLISHING CO.,

BOX 124
Rochester, N. Y.

PERSIAN WALNUT

Heaviest Walnut Crop on Record

Hillsboro, Ore., Aug. 10—Walnut trees are in fine condition now, owing to the heavy rains the forepart of July. Crop one of the heaviest on record, of good sized nuts.

Many new orchards will be planted in this vicinity the coming season. Trees have been purchased for several plantings and others are planning to buy soon. Tree sales to date the heaviest on record, nearly all grafted Franquette on Northern California black walnut root.

The Western Walnut Association's annual inspection tour was held Aug. 16 through parts of Washington and Yamhill counties. Several of the best orchards and one of the largest walnut nurseries in the state were visited.

FERD GRONER

Walnut Trees Heavily Loaded

All conditions seem shaping for the best walnut season Carpinteria and Goleta valley, California growers have had for many seasons. The blight in Goleta groves is believed to have run its course for the season, while the damage is found, after a careful survey of all affected groves, to have been slight. The codlin moth in the Carpinteria groves has been brought under control, and over this section a similar survey brings reports that the stern campaign waged for two seasons against the moth has practically stamped it out, and that the loss to the 1923 crop from this pest will be practically nil. The aphid, also, has done little damage, and its activities are over for the season.

The trees are heavily loaded, the walnuts are running on an average to large sizes, and unless unforeseen damage creeps in, growers say they should bring to market not only a large crop, but also a crop free of blemish. C. C. Thorpe, manager of the California Walnut Growers' Association, addressing the walnut growers of this vicinity, at a recently largely attended meeting in Goleta, stated that the outlook was favorable for good market conditions.

The Industry in Washington

Clarke county, Washington, has a coming industry in the culture of the English walnut and filbert, which can be successfully grown as the soil and climate are ideal for this variety of crop. While the industry is yet young, it is gaining rapidly and in some of the best sections walnuts and filberts will be a close second to the prune crop, if not in first place in various sections which are especially adapted to the culture. Already groves are giving good returns and in some instances yielding more profit than prune trees which are being replaced by walnut and filbert trees in numerous places.

Some of the most prominent nut enthusiasts are A. A. Quarnberg, Henry J. Biddle, John Spurgeon, Fred Brooker, A. Ward, Charles Gibbons, L. F. Russell and R. E. Turk, who live in various parts of the county and are growing nuts successfully. Russell is a prominent prune grower and president of the Washington Growers' Packing Corporation and is gradually replacing his prune trees with walnut trees, taking up every third prune tree and planting in its place a grafted walnut tree. He expects to continue until all prune trees have been removed.

One of the varieties that does best is the Vrooman Franquette and last season several hundred grafted trees were planted on his Sunset View farm, which includes a 60 acre prune orchard.

Another prominent walnut culturist is R. E. Turk, near Washougal, who owns the

largest field of bearing walnuts in Washington, consisting of 900 13-year-old trees, covering 22 acres. It is situated in the Mount Pleasant district near the Skamania county line. He expects to set out 70 acres more of walnuts to be interplanted to filberts as soon as possible. Turk uses the 40 foot spacing for walnuts and a 10 by 10 filler system for filberts. Neighboring farmers and fruit growers are following in Turk's steps, planting a considerable acreage to both varieties of nuts, which will soon out-number fruit trees in that community.

Other walnut groves in the Lake Shore and Felida and Fruit Valley districts are paying well and their owners are well satisfied, and believe that the walnut crop will rank among the leading industries in Clarke county before many years.—Portland, Ore., Journal.

Searcy, Ark., Sept. 3—M. M. Kirby exhibited a twig from an English walnut tree containing several nearly grown walnuts. He has another twig with 13 walnuts on it. He has seven or eight trees which are about eight years old and are bearing nicely. Thus it is assured that the English walnut will grow well and mature here.

THE ALMOND

California Almond Conditions

Sacramento, Cal., Sept. 5—Almond trees are in better condition than usual at this season of the year on account of late rains and cool summer. The crop, however, is not quite as good as last year on the basis of per acre condition, because of heavy frosts in some districts. The total crop for the state, however, will be larger than ever, due to new acreage coming into bearing. It is a little too early to estimate actual tonnage yet.

Market conditions have cut new plantings to almost nothing.

R. H. TAYLOR.

California Almond Crop Large

In a bulletin issued by the California Almond Growers' Exchange announcing the beginning of the harvest it is stated that from Butte County on the north to Riverside County and far to the south come reports that growers are knocking the earlier varieties of almonds from heavily laden trees. The good weather of the past few months with the vigorous thrust that spring gave to the almond fruit has brought the nuts to earlier maturity than usual.

From all parts of the state experts reports almonds of large size and rich quality. The trees are weighted with the greatest crop in the history of the state.

Information for Growers

The California Almond Growers Exchange makes these suggestions to its members:

Quality—Thousands of dollars are being spent annually to increase the demand for California almonds. All this work can be lost if quality is not maintained. To put out a fine product and an article that will demand a price, it is necessary that the observance of quality standard be made by the grower as well as the warehouseman. Quality can only be maintained by the grower doing his part. Keep your varieties separate, and keep the qualities separate. Do not mix almonds under any circumstances in sacks or boxes and become discolored. Hull and dry promptly. Deliver promptly and give the warehouseman any information that may assist him in grading.

Stick-Tights—Large lots of stick-tights are shelled separately. Small lots are pooled. To secure the most money from your stick-tights, keep varieties separate. Tag each bag with a tag showing your name and the variety of stick-tight in the bag. For example: "John Jones, Drake stick-tights." Tags will be furnished free by the Exchange upon request. NePlus stick-tights are usually of no value and do not warrant shipping. Ofttimes the expense of

freight and handling small lots of stick-tights is more than the value of the lot. The Exchange does not recommend the delivery of very small lots of stick-tights for these reasons.

First Shipment California Almonds

The first shipment of 1923 crop California Blue Diamond almonds—five carloads of them—left Chicago Aug. 25 for the East. The shipment was made by the California Almond Growers Exchange. They are the first almonds to leave California this year and were consigned to New York.

The shipment was straight Nonpareil variety as this is the earliest variety harvested and no other varieties of the 1923 crop have been knocked from the trees yet. Experts who have examined this first shipment expressed the opinion that they indicate an almond crop this year of extraordinary quality. Last year the first almonds to leave the state were shipped Sept. 18.

Exchange officials announced that their co-operative will ship 75 per cent of all the 1923 almond crop which is estimated at about 8,500 tons and that they have a heavy order list to fill.

Record Almond Crop

The California almond crop will be the heaviest in the history of the state, according to a recent survey made by the California Almond Growers Exchange. The survey shows that a 25 per cent increase over last year's crop is in sight.

The California Almond Growers Exchange on August 20th had 3185 members, an increase of 718 since June 1, 1922.

The Wholesaler Indispensable

The Exchange is well within the fact when it states that the wholesaler of food products is an economical and necessary part of our distributive system. He is not a profiteer but, on the contrary, takes perhaps a smaller profit for his services than any other element in the system, while at the same time he renders an indispensable service.

The Harvard Bureau of Business Research, in a report on the operation of wholesale grocery business in 1922, showed that the average net profit of the wholesaler was one-half of one per cent. His gross margin amounted to eleven and six-tenths percent and operation expense was eleven and one-tenth percent.

The wholesale grower or any wholesale jobber is in reality a credit pool. He concentrates the goods of the producer and manufacturer in one place, using his own capital for the purchase of the goods, for their storage and their distribution. The retailer operating on a smaller capital is unable to buy the products of manufacturers in sufficient quantities to meet the demand over any period of time. It would be a tremendous economic waste if this were ever attempted.

One-half of one percent. Little enough. Only one-half cent of each dollar's worth of goods sold.

Nor is the retailer getting rich. The Harvard Bureau studied four hundred and forty-three retail firms in different parts of the country. The report of the Bureau shows that the aggregate gross profits were 19.3% of net sales. Expenses were 18%, leaving a net average profit of 1.3% of sales.—California Almond Growers Exchange.

50% at San Saba

San Saba, Tex., Aug. 16—Crop prospects at this writing in this locality are for about 50% normal yield. Condition reported similar at Bend district.

The Chamber of Commerce premium collection of pecans at San Saba Fair was admired by thousands of visitors.

E. H. NORRIS

During a recent visit to Seguin, Tex., J. H. Burkett, nut specialist of the Texas Dept. of Agr., said that the Guadalupe pecan is growing in favor on the market and that it has a nation-wide reputation. He said that on the Richard Govett place he found a tree which in his estimation produced the second best pecan that was ever marketed.

THE PECAN

GEORGIA

Pecans in Albany District

Albany, Ga., Sept. 6—Condition of pecan trees, 95%; condition of pecan nuts, 85%.

The extension in new pecan orchards goes merrily on in the now famous "Albany District." No prospect of early abatement.

J. W. GILLESPIE.

Planting 1,000 More Pecan Trees

Macon, Ga., Sept. 3—Good conditions. Our trees are young and not in bearing to amount to anything. We are putting out an additional one thousand pecan trees this fall to bring our total up to 5,000 trees. Georgia farming lands are the cheapest thing in the world. Lands bought now will show a big increase in values.

A. C. FELTON, JR.

Fine Crop in Albany District

Albany, Ga., Sept. 8—While the pecan crop through this section will not be as good as it gave evidence of being ninety days ago, yet we are going to mature a splendid crop of nuts through here, in spite of everything.

There has been considerably shedding and there was some damage from the nut case bearer early in the spring; but if all the nuts that were then on the trees had matured, our trees would have been overburdened.

W. P. BULLARD,

Pres. Nat'l Pecan Growers Exchange.

At Milledgeville, Ga.

Milledgeville, Ga., Sept. 7—A. C. McKinley and Chas. F. Barrett have contracted with the Milledgeville Nursery Co., to plant 50 acres, each, to grafted pecan trees, this season. These trees will be planted within three miles of Milledgeville. Several thousand trees, in smaller plantings will be made in this, Baldwin county, this season.

100,000 peach trees will also be planted in this county this fall.

Pecan trees throughout this section are in a healthy condition and the crop promises to be a heavy one.

The Milledgeville Nursery Company has just completed its season's budding and is preparing to plant 20 acres in pecan nuts this fall, which will give 55 acres in young Nursery stock, in one body.

EDWARDS & PATTERSON.

Sparta, Ga., Aug. 20—The pecan crop in this county is said to be the best in recent years. All of the groves in the county, the largest being owned by John O. Moore, of Culverton, which contains about 500 trees, are laden with a heavy crop of nuts.

OKLAHOMA

Stillwater, Okla., Sept. 8—The pecan crop is rather spotted. In some sections there is 100% crop while in others it is almost nothing. The state, no doubt, will have 35 to 40% crop. Very few pecan orchards are being started by setting young Nursery trees, but several farmers are having their native trees top-worked.

D. V. Shuhart from Arlington, Tex., pecan enthusiast, is a new man in the Hort. Dept. of the Okla. A. & M. College.

EARL D. MARKWELL,

Asst. Horticulturist.

AMERICAN NUT JOURNAL, the Official Journal, three years for \$5.00; twelve months, \$2.00; single copy 20c.

MISSISSIPPI

Ocean Springs, Miss., Sept. 5—Pecan crop quite good, some branches breaking from weight of nuts. There was a large crop of caterpillars to contend with but we have exterminated them as close as possible.

Considerable ground is cleared three to four miles north of Ocean Springs for extension of pecan orcharding; plenty of room for more trees in that section.

C. FORKERT.

Pecan Crop in Mississippi

Iowana, Miss., Sept. 6—My impression is that the general crop will be good, though possibly in some orchards below normal.

My own crop will be good, but not extra; probably better than last year, but not so heavy as two years ago. An unusual number of nuts have fallen off and continue falling. This has very materially diminished my crop. From reports I judge this has been quite general. Here on the coast we have had an unusual rainfall. During August it rained almost daily and continues yet, though apparently diminishing. The entire season has been quite rainy.

L. F. CULVER.

Mississippi Pecan Crop Light

Canton, Miss. Sept. 6—Crop prospect barely 10% of last year's.

I set out 1500 pecan trees last year and will set out 500 or more this year.

VIC TROLIO.

SOUTH CAROLINA

Only One In Upper South Carolina

Conditions of trees first-class with exception of heavily infested with web-worms. Very little rosette. Good color.

Crop prospects rather poor, owing to heavy crop. Schley nuts about all fell off, and no Frotschers left at all. Stuart crop fair. Alley fair. Georgia Giant heavily loaded with good nuts. Delmas scabbing badly. Pabst best variety we have this year. Weevil bad on Stuarts and Schleys—in fact if someone doesn't discover a remedy, pecan weevil will finally destroy crop like boll weevil on cotton. Government experts seem asleep on the weevil job.

T. K. Lee has set 400 trees of Pabst, Alley, Delmas and Success. All doing well at this time.

I have the only pecan orchard in in upper South Carolina and people often come from 50 miles away to look it over. As a whole, it is the best investment in the county, and prospects are for greatly increased value as the years go by.

B. M. LEE.

ARKANSAS

Plans Pecan Groves in Arkansas

Albert Searcy, Memphis, Tenn., has 1200 acres at Snow Lake Section, Desha county, Arkansas, 115 miles south of Memphis, four miles from the Mississippi river, 12 miles from White river, which has been used as a cotton plantation, but which he proposes to convert into a great pecan grove. There are several thousand native pecan trees on the property. Three hundred and sixty-five acres are in a high state of cultivation, under cotton and corn; the rest is in timber. He proposes to cut all trees for timber, except the pecan trees, and to divide the land into units for pecan groves, planting 20 propagated pecan trees on each acre.

O. K. Darden, Ardmore, Okla., plans to bud 10,000 pecan trees in Southern Oklahoma this season.

Just mention AMERICAN NUT JOURNAL

CALIFORNIA

Riverside, Cal., Sept. 6—Projects for normal crop of walnuts are at this time extra good. Walnuts are largely grown in four southern counties, viz., Los Angeles, Orange, Ventura and Santa Barbara (coast counties). In the interior counties such as Riverside and San Bernardino are some quite large plantings and many border trees.

Pecans are being planted mostly in the interior. What few producing trees there are, are showing well. Almonds this year are almost complete failure in my section. What their condition is in the almond growing section I do not know.

Many walnut orchards are constantly being planted throughout the southern counties. Perhaps 10,000 to 15,000 pecan trees were planted in Southern California last season. Prospects are for as large planting of this tree this year. Pecans can be made very remunerative in many sections of California and Arizona. But particular attention must be given to variety, root stock and cultural methods. Irrigation methods and practice are the large determining factors where scarcely any rainfall comes during the growing season.

ROBERT A. HARRIS.

FLORIDA

50% at Monticello, Fla.

Monticello, Fla., Sept. 10—Nut trees in this section have made a good growth and are in fine condition. On account of continuous heavy rains, nuts have shed badly and will not be over fifty per cent of crop.

Many new orchards were planted last winter and extension made to the old ones. A number of new ones will be planted this winter if the land can be made ready.

GEO. A. MURRELL.

In Judge Potter's Orchards

Marion, Ill., Sept. 5—The nut trees never looked better and have made wonderful growth, although the caterpillars have defoliated great portions of the foliage.

I have about a dozen pecans on two Busseron trees which are 8 years old. There were considerable blooms last spring but the cold rains caused most of the young nuts to drop.

I have several budded black walnuts on the Stabler and Thomas trees only four years old. My seedling chinquapin is full of nuts and I am anxious to see what the harvest will be.

I know of no new nut orchards in this section. I seem to be the only nut in this section anywhere.

I know of no new nuts except the seedling chinquapin which I developed from planting some Rush chinquapins about six years ago, and one of the seedlings bore a few nuts two years ago. Last year it bore none, but this year it is loaded. The nuts are about a third larger than the Rush ancestor and the flavor is excellent. It is growing in my yard. It is not a very fine-looking tree, but it looks as though it will be a prolific bearer.

W. O. POTTER.

Prof. R. H. Taylor of the California Almond Growers Exchange is addressing meetings of almond growers in various parts of the state on fall and winter spraying, cover crops, harvesting, hulling and delivery.

The National Geographic Society will send an expedition to China headed by Joseph F. Rock, to seek a blight-resistant chestnut.

The Round Table

Nut Cracking Firm Enthusiastic About Black Walnuts

Editor American Nut Journal:

The manager of a nut cracking firm writes me that he is very enthusiastic about black walnuts and that they expect to triple or quadruple their production of black walnut meats this year, as they are entirely satisfied with their business to date.

He says that he estimates that not over six per cent of the black walnuts that fall are gathered. A good deal of this is due to the practice of the commission merchants making such poor returns on the nuts shipped to him. They started out last year paying three cents a pound for the wild black walnuts, thinking that this would encourage the gathering of these nuts, but soon found that the brokers and commission men were making the money, and that it was not going to the real source of production and so they had to drop their price to as low as they could buy the nuts. He says that excellent progress is being made on a machine to crack—not just crush—black walnuts successfully, and he is doing work in that line, and also to remove the small bits of nuts which sometimes stick to the meats and are very objectionable, of course.

This firm has cracked and shelled successfully about a million pounds of black walnuts, so is in a position to speak with some knowledge of the matter.

But the most interesting information of all is that the average production for the years they have been cracking black walnuts shows a proportion of meats to uncracked nuts of 12½% net, while the best nuts run 16 to 18%. These are all wild

nuts, too. He says that the nuts are about the same as to thickness of shells, but that the proportion of the meat to the shell is greater in these better nuts.

The picking and cracking expense of black walnuts is but very little greater than pecans, but the final cleaning to remove all bits of shell and have the meats wholly free from shell, has been very expensive, and that is now met by the new machine he has perfected and patented. He has been working with the inventor of the best nut cracking machine and says this machine will be perfected in a short time. He says that this machine—not his—has an excellent cracking principle—the best—and will make it possible to get out the nuts with a large percentage of whole kernels or meats. His cleaning machine removes the small particles of shell and this has been the greatest drawback to the use of black walnut meats up to this time. This man offers to co-operate with me in every way he can giving both his time and money toward it, to help get new and better varieties of black walnuts. That is fine. He says that when the cracking machine is perfected, it will be absolutely fool proof. This is all very interesting, indeed, and of practical value.

I have a letter from a man in Bakersfield, California, telling of a man there who some years ago sold four black walnut trees, roots and all and paid him \$1,650 for the four walnut trees. There are at least a couple firms in Philadelphia that use black walnuts, one of these being a million dollar firm.

H. R. MOSNAT.

Chicago, Ill.

Pacific Coast Black Walnuts in the East

Editor American Nut Journal:

In the August number of the *American Nut Journal* I notice what Mr. Mosnat has to say regarding the Royal and Paradox black walnuts, also the California black walnut. It is possible that my experience in these regards may be of interest.

In the fall of 1911 I purchased 6 Royal walnut trees from California from the Roeding Nursery Co., Fresno, California, which at that time was putting out Burbank's productions. These were grafted trees on California black walnut root. As I owned no land then, I set one in the factory yard of S. M. Bixby & Co., in Brooklyn, N. Y., and gave the others to friends. Those I gave to friends had a brief existence and then died.

The one set in the factory yard just kept alive for six years until, in the fall of 1917, I brought it to Baldwin and set it in good ground where as soon as it became established it has grown well. It has not however, grown faster than the Thomas black walnut. This year the Royal tree is bearing nuts.

The grafted Paradox walnuts brought to Baldwin about three years ago have shown no remarkable vigor of growth although one of them bloomed rather freely this year and would seem to give promise of bearing fairly. One might think from my experience that either different behavior is to be expected here from what we have in California or that my varieties are not true. The foli-

age gives unquestioned evidence of their being hybrids and I am inclined to think that we are really getting different behavior.

I have never tested a California black walnut that ranked at all with our best eastern varieties but it is only fair to state that I have probably had 100 eastern black walnuts to test where I have had one California black walnut, and so perhaps judgment on this point should be withheld. The California black walnut winter kills somewhat here.

WILLARD G. BIXBY.

Baldwin, N. Y., August 23, 1923.

Opportunity For Nut Exhibit

Nut grower. North and South, East and West, should know that nuts of all kinds grown in the U. S. are included in the program for the Eastern Apple Exposition and

Fruit Show to be held at Grand Central Palace, New York City, Nov. 3-10. Chairman A. R. Rogers desires nut exhibits. He will supply full information to all who are interested.

What Can Be Done in Michigan

Editor American Nut Journal:

The enclosed from Michigan is rather encouraging both for top working trees in Michigan and the planting of grafted trees. We supplied Mr. Wallace recently a list of Michigan customers that he wanted to follow up and see how the trees had done. While there will undoubtedly be some failures, this would also be the case with any other trees planted, as many people who order trees do not know how to plant or care for trees and often lose interest in them after planting.

J. F. JONES

Lansaster, Pa.

I am informed by Mr. J. F. Jones, the nut tree specialist, of Lancaster, Pennsylvania, that on April 11, 1922, you ordered two English walnuts and one pecan. Therefore, this letter is for the purpose of inquiring what success you have had from the planting of these trees.

Did they stand the winter well, and have they made good growths, and are you pleased with the results?

I would appreciate full information concerning the growth and development of each variety, together with your private opinion on the practicability of planting such varieties here in Michigan, as commercial orchards.

Thanking you in advance for all such information as you may be good enough to send me, and trusting I may at some time be able to reciprocate, I am,

H. M. WALLACE

Detroit, Mich.

Mr. J. F. Jones,
Lancaster, Pa.

I thought I would write and tell you about my success in grafting nut trees, as I am surprised with the results I received.

I grafted 21 small black walnut trees and one large black walnut tree. Out of the 21 small trees, 15 of them grew finely until a neighbor's cows broke in and destroyed a number of them. Some have grown to be four feet tall and none are less than two feet. The large tree which I grafted about 14 feet high on the trunk has grown about six feet and has branches from two to three feet long.

Our soil is a heavy clay soil and seems to be just the thing for nut tree production. The trees that I bought of you are all coming along just fine, they all seem to stand the drought very well.

Yesterday I answered a letter regarding

Who Has Success With English Walnut?

Editor American Nut Journal:

There seems to be quite a difference of opinion in regard to the possibilities of English walnuts between our president and secretary, and I would like to see the matter thoroughly ironed out. It seems that President McGlennon thinks very favorably of the prospects of English walnuts, while Secretary Deming is not so favorably impressed. These are things I would like to see come up for general and thorough discussion.

One thing more that I would like to see more definitely settled: We often have reports from different sections of the North

and East where English walnuts are doing fairly well. Now, surely, there are some sections where the English walnut is thriving better than in other sections of the North and East. This is a point that I would like to see thoroughly discussed. It is very essential for us to know who are from other sections of the country and desire to engage in the culture of English walnuts—the most suited and adapted location for this business. Let us hear from Maryland, Delaware, Virginia, New York and other favorable places.

CHAS. O. HENNINGER.

Indianapolis, Ind.

information about your trees. The inquiry was from the research corporation at Detroit, I told them all about how well the trees had done for me and the way they wintered without any protection whatever.

I also gave them my opinion about planting commercial orchards in Michigan. I told them what a great improvement grafted trees are over seedlings. A neighbor has got a ten year old seedling and it hasn't borne a nut; its not much bigger now than the grafted trees I bought from you.

HARRY BURGARDT.

Union City, Mich.

Strong Demand For Nut Trees

Editor American Nut Journal:

The average person is "from Missouri," and has to be shown! He takes hold of new things slowly; but enough grafted or budded nut trees are now coming into bearing to create interest, and from now on planting will increase wonderfully. Those going in to it now have the way paved for them and will know nothing of the hard pull it took to create interest and sell nut trees a few years back.

The demand for these trees has increased wonderfully the past two or three years and this demand will create the supply. It is as easy to sell a hundred good nut trees today as it was one tree ten years ago, and the demand will be practically unlimited ten years from now if I am any prophet.

The English walnut crop here is very good indeed. Mr. Rush's trees are heavily loaded. The black walnut is rather a light crop, although some trees are well loaded. This is perhaps due to the freeze on or about May 1, 1922 when the new growth was killed back, resulting in the loss of the staminate bloom for this spring, at least to a large extent.

The pecans in my test orchard have made a fine growth despite the extreme drouth this year and last. About half the trees have nuts on them and a few trees have fair crops, running as high as five nuts to

the cluster, and averaging three nuts. Busseron and Posey show up with the best bearing trees to date, though Niblack shows up perhaps the best all round in bearing as all the trees of this sort are bearing this year.

Filberts are bearing well this year also in most sorts, and the Rush native hazel is very heavily loaded as usual. This has proven to be a hard one to propagate, which I regret very much. We have, however, a few hundred good transplants of it on their own roots that I want to see go into good hands this year. The trouble is not to sell stuff but to keep some of these enthusiasts from taking all you have of these new things. That is why we have to limit the number going to any one party.

J. F. JONES.

Lancaster, Pa.

Here's an Excellent Suggestion

Editor American Nut Journal:

Another experimental station is asked for in Texas, exclusively for the pecan. Beg to say that is not what is lacking because pecan bulletins without limit have been sent out from all the experimental stations where pecan trees grow, but information about the actual breeding of the trees, which is so very important, that is yet to come. None of the experimental stations are located on breeding grounds.

Success for this work depends on locations which are only found in small areas, although widely dispersed. These choice spots are in the crooks and bends of our rivers, overflowed lands, where alluvial deposits are made and the roots of the trees reach permanent water to furnish a continuous flow of rich sap. The vigorous and healthy growth of the trees in such places is proof of being ideal breeding grounds.

Now, by taking advantage of the natural growth of wild trees, as described, I have repeatedly fruited by top working seedling trees five years from planting the seed, instead of waiting ten years or more. So, in

view of these facts, would say that the whole state of Texas already has an abundance of experimental stations for this work. But there must be some incentive to use them. So now if the state of Texas will offer a liberal reward, not less than one thousand dollars, to any one who will produce a new and valuable pecan, our rising generation will be mighty apt to get interested. The parentage, both father and mother trees, are to be the proof of the identity of it. Some may think it would be folly to compete with me. Will say that I will not be a competitor at all. Any reward is for someone else. There are no secrets, I have been giving my experience from time to time with the hope of getting others interested. Am now making another effort, which ought to be successful.

E. E. RISIEN

What Co-operative Marketing Does

The California Walnut Growers' association, the marketing body of thirty-nine local growers' organizations, sold the 1922 crop and traced it to the consumer.

Of the consumer's dollar the grower got 55.6 per cent; the retailer, 26.3 per cent; wholesaler, 7.3 per cent; freight, 4.8 per cent; marketing 3.3 per cent; packing, 2.7 per cent.

That is a decided improvement over the farmer's 37 per cent which we have heard so much about.

The retailer seems to have done pretty well. His share of the gross was much larger than that absorbed by the grocer for most products. How much of his 26.3 per cent of the gross was profit may be judged from a report of the Harvard business bureau on the retail grocery business. The bureau found from an examination of 443 firms in 1922, that the aggregate gross profits were 19.3 per cent of gross sales; and expenses of carrying on the business were 18 percent of sales, leaving a net average profit of 1.3 per cent of sales, with a stock turnover of 10.1 times per year.

MEMBERSHIP DRIVE

National Pecan Growers Association
The National Pecan Growers Association fee for membership is \$2.00 per year, with a student membership fee of \$1.00.

The subscription price for the American Nut Journal, official organ, is \$2.00 per year.

Note combination offer below.

REGULAR YEARLY RATES

Association Membership.....\$2.00
American Nut Journal..... 2.00

SPECIAL YEARLY RATES

Association Membership } \$3.25
American Nut Journal }

Address J. Lloyd Abbot, Sec'y.
Route 1, Spring Hill, Ala.

PECAN Nursery Stock

From one of the best nurseries in the pecan belt. Stock furnished in all sizes and all leading varieties.
Special prices to Dealers. Write us for prices.

Flint River Pecan Co.

Albany, Georgia

Member Pecan Nurserymen's Ass'n.

For Sale:

17 acres of excellent land for growing Georgia budded pecans, about one mile north of Plains, Sumter County, Georgia; or will give acceptable at least ten-year settler a two acre home site. Address,
A Pioneer Southern Pecan Grower,
12 Boyd Ave., Takoma Park, D. C.

A NEW BOOK!

NUT GROWING

By Robert T. Morris

The latest and only up to date book on the newest and one of the most important branches of Horticulture, giving a broad survey of a rapidly growing industry. Detailed explanation of successful methods of propagation and the new process of grafting with the use of paraffin; illustrated.

An invaluable work for all nut growers.

Price \$2.65, Postpaid

AMERICAN FRUITS PUB'G. CO.

39 State St., BOX 124, Rochester, N. Y.

The Logical Market Place for Sale of Nuts

The Advertising Columns of the *American Nut Journal* Chief Exponent of the Trade.

Hundreds of Readers of this Journal Ask for Pecan Nuts in Moderate Quantity at Prices Less Than the Retail Price per Pound in Northern Markets. They Would Be Eager Buyers if They Knew Where to Apply. If There is Any Surplus at Any Time, the Advertising Columns of this

Journal Will Dispose of It. Rate, \$2.80 per Inch. Announcement Should be Maintained the Year Around (Yearly Rate, less than 60 Cents per Inch a Week) to Secure Best Results. Make Your Name a Household Word Wherever Pecans Are Wanted. Make It Easy To Procure Them.

AMERICAN NUT JOURNAL

P. O. Box 124

ROCHESTER, N. Y.

American Fruits Company's Library Opportunities

PRACTICAL BOOKS ON HORTICULTURE, NUT GROWING, NURSERY PRACTICE

Any of the following books will be sent on receipt of price by AMERICAN FRUITS PUB'G CO.,
123-125 Ellwanger & Barry Bldg., ROCHESTER, N. Y. Prices subject to change.

American Apple Orchard By F. A. Waugh.....	\$1.90	Irrigation for the Orchard—Stewart	1.75	Plant Propagation; Greenhouse and Nursery Practice—M. G. Kains...	2.40
American Fruit Culturist By John J. Thomas.....	3.65	Land Drainage—Joseph H. Jeffrey..	2.15	Plant Physiology—B. M. Duggar....	3.00
American Fruit Farm—F. N. Thorpe	2.65	Landscape Gardening—Downing's Famous Work—10th Edition— Revised by Waugh.....	6.00	Pomology, Text-book of—Gourley...	2.75
American Grape Culture—Munson...	2.65	Landscape Gardening—House and Garden's Book of Gardens, 9 1/2 x 12 1/2, 400 Illustrations.....	5.15	Practical Forestry—A. S. Fuller....	2.15
American Grape Growing and Wine Making—George Husmann	2.15	Landscape Gardening Kemp—Re- vised by F. A. Waugh.....	2.15	Practical Fruit Grower—Maynard...	1.00
American Horticultural Manual By Budd-Hansen, two vols....	3.30	Landscape Gardening—Maynard....	2.65	Practical Tree Repair—Peets.....	2.65
American Peach Orchard—Waugh..	1.90	Landscape Gardening—The Small Place—By Elsa Rehmann.....	3.65	Principles of Agriculture—Bailey...	2.00
Bulbs and Tuberous-Rooted Plants..	2.15	Landscape Gardening—Cridland....	2.65	Productive Orchard—F. C. Sears...	2.65
Bush Fruits—By F. W. Card.....	3.15	Landscape Gardening—The Com- plete Garden—Albert D. Taylor...	6.15	Principles of Fruit Growing—Bailey	2.65
California Fruits and How to Grow Them—E. J. Wickson, A. M....	4.15	Landscape Gardening—O. C. Simonds	6.15	Principles of Pruning—Kains.....	2.65
Citrus Fruits—J. E. Colt.....	3.40	Manual American Grape Growing— Hedrick	3.40	Pruning Manual—By L. H. Bailey...	2.65
Commercial Apple Industry of North America	3.65	Making Horticulture Pay—Kains...	1.90	Putnam's Garden Hand Book.....	2.00
Cyclopedia of Hardy Fruits By U. P. Hedrick	6.20	Manual of Fruit Diseases—L. R. Hessler, H. H. Whetzel.....	3.15	Quince Culture—W. W. Meech.....	1.35
Dwarf Fruit Trees—Waugh.....	1.00	Manual of Fruit Insects—M. V. Slingerland, C. R. Crosby.....	3.90	How To Grow Roses—Robert Pyle..	1.50
Farm Bureau Movement—O. M. Kille	2.15	Manual of Gardening—L. H. Bailey...	3.40	Rose—H. B. Ellwanger.....	1.40
Fertilizers and Crops By Dr. L. L. Van Slyke.....	3.40	Manual Tropical and Sub-tropical Fruits—Popenoe	3.90	Rose in America—McFarland.....	3.15
Fertilizers—Edward B. Voorhees...	2.65	Manual of Tree Diseases—Rankin...	3.40	Sales Promotion By Mail.....	2.15
Field Notes on Apple Culture By Dr. L. H. Bailey.....	.90	Manual of Vegetable Garden Insects By Crosby & Leonard.....	2.90	Small Fruit Culturist—A. S. Fuller..	1.75
First Principles of Soil Fertility By Alfred Vivian.....	1.50	Manures and Fertilizers—Wheeler..	2.65	Soils—E. W. Hilgard.....	4.25
Forests of N. Y. State—Recknagel..	2.65	Modern Fruit Marketing—Brown...	1.90	Soils—Lyon-Fippin-Buckman	3.40
Fruit Growing in Arid Regions.....	2.75	Modern Propagation Tree Fruits— B. S. Brown.....	1.65	Soils—F. H. King.....	2.40
Fruit Garden—P. Barry.....	2.40	Nature's Garden—Neltje Blanchan..	6.30	Soils—By Charles W. Burkett.....	1.90
Fruit Harvesting, Marketing—Waugh	1.90	Nursery Manual—Dr. L. H. Bailey...	2.65	Spraying Crops—C. M. Weed.....	1.00
Fruit Insects—Crosby.....	3.90	Natural Style Landscaping—Waugh	2.65	Standard Cyclopedia of Horticulture Edited by L. H. Bailey. In six vol- umes. 3,600 pages. 4,000 text engravings. 96 sepia halftones. 500 collaborators. May be had on installment payments.....	40.00
Fumigation Methods	1.90	Nut Culturist—Andrew S. Fuller...	2.15	Strawberry in North America—S. W. Fletcher	1.90
Gardening for Pleasure—Henderson.	2.15	Nut Growing: Latest Information; Guide to Propagating—By Rob- ert T. Morris.....	2.65	Strawberry Growing—S. W. Fletcher	2.40
Gardening for Profit—Henderson...	2.15	Old Time Gardens—Alice M. Earle..	2.65	Success in the Suburbs—John R. Mc- Mahon	2.15
Grape Growers Guide—Chorlton....	1.65	Ornamental Gardening—E. A. Long.	2.15	Successful Fruit Culture—Maynard	1.75
Grape Culturist—A. S. Fuller.....	2.15	Principles of Floriculture.....	3.40	Surgeon's Philosophy—Dr. R. T. Morris	3.15
Greenhouse Construction—Taft.....	2.40	Parsons on the Rose—Parsons.....	1.75	Systematic Pomology—Waugh.....	1.90
Greenhouse Management—Taft.....	2.40	Peach Culture—J. A. Fulton.....	1.65	Ten Acres Enough—I. P. Roberts...	1.75
Hedges, Windbreaks, Shelters.....	1.00	Peach Growing—By H. P. Gould....	2.65	Wild Fruits, How to Know—Peterson	2.15
Roses—How to Grow—Robert Pyle..	1.50	Pear Culture for Profit—Quinn....	1.35	Wind and Weather—McAdie.....	1.40
Injurious Insects—F. L. Washburn..	2.65	Picturesque Gardens—Henderson....	2.25		
Insects of Economic Importance— Herrick	2.15	Plant Breeding—By Dr. L. H. Bailey	3.40		
Insect Book—Dr. L. O. Howard.....	6.30				
Insects and Insecticides—Weed.....	2.15				
Insect Pests of Farm, Orchard and Garden—Sanderson and Peairs..	4.65				
Insecticides and Fungicides.....	3.20				
Irrigation Farming—L. M. Wilcox...	2.40				

A paper which gives the best value for the money to the reader will give the best value to the advertiser as well. I don't think there is any argument about the soundness of this view.—H. Dumont, Chicalo, Ill., in Printer's Ink.

WANTED Names and Addresses of Owners of Groves of Native Nut Trees in Northern States.

In the interest of Northern Nut Culture this Journal desires the above information to serve as a basis for extension of Nut Culture.

Readers will confer a favor by sending us lists of names and addresses of those who have stands of nut trees on their property, (with some account of productivity if practicable). Black walnut, English walnut, butternut, hickory, chestnut, filbert, etc.

American Nut Journal P.O. Box 124 Rochester, N. Y.

BUDED and GRAFTED Nut Trees

Start right with my hardy Pennsylvania grown trees and be assured of success.

Attractive Catalogue Free.

I have this season a fine lot of stake trained Pecan, English Walnut, Black Walnut and Persimmon trees budded on root pruned transplanted stocks, that will please you and that will transplant easily and early. Write for catalogue.

J. F. JONES, The Nut Specialist
LANCASTER, PA.

FOR SALE: 5-ACRE PECAN GROVE, 12 yrs. old bearing Albany Ga. district. Will sell cheap. Address
CHAS. DALY, ST. JAMES, L. I. NEW YORK

PECANS
We are the pioneer growers of budded and grafted pecans in the South. Have a complete stock of the leading standard varieties. Can furnish trees we know will please and give satisfactory results. Catalog free.
INTERSTATE NURSERIES
C. M. Griffing & Co. Props., Jacksonville, Fla.

PECAN GROVE FARM
315 acres scientifically developed by us, and now producing. Especially well adapted for stock farm. Will sell at price that gives buyer good money's worth.
HARLAN FARMS NURSERY
Pecan Specialists
Lockhart, Alabama

CONSULTING TROPICAL HORTICULTURIST and TREE EXPERT

MARVEY C. STILES

CHOCOLATE BAYOU, TEXAS

Specializing in Pecans, Grapefruit, Avocados, and Landscape Development. Long experienced expert for—and present active director of—many such large projects throughout tropics and semi-tropics. Examinations, Reports, Plans, Specifications and Estimates. Correspondence suggested.

Have You Nuts to Sell?

HICKORY NUTS BLACK WALNUTS
BUTTERNUTS CHESTNUTS

Hundreds of buyers are asking where the nuts can be obtained in quantity. Place your Sale Advertisement in the AMERICAN NUT JOURNAL for quick returns. \$2.80 per inch.

39 State St., Rochester, N. Y.

American Nut Journal

**DEVOTED TO NUT GROWING INTERESTS
GENERALLY THROUGHOUT THE AMERICAS**

Vol. XIX. No. 4

OCTOBER, 1923

Per Copy 20c.

Big Business In Marketing Pecans

An Address of Highest Importance to Every Pecan
Grower, Delivered at Organization Meeting of
the Southern Pecan Growers Association in
Albany, Georgia, September 7, 1923

By CHARLES J. BRAND, Consulting Specialist, U. S. Dept. Agriculture

THIS Address, replete with practical information and full instructions for procedure to place the rapidly growing Pecan Industry on a sound business basis through systematic co-operative marketing, insuring highest regular permanent returns to the grower, in increasing ratio, will be published in succeeding issues of the

American Nut Journal

Official Journal of the
National Pecan Growers Association

Publication of the Address will commence in the November issue of the Journal and will continue in the following issues. This Address should be read and re-read, studied in detail and kept on file by every Pecan Grower. Its author is a high authority on the subject. Under any other than Government auspices the advice in this Address would cost a large amount of money.

If not already a subscriber, send \$2.00 at once for the Official Journal (\$3.25 includes membership in the National Pecan Growers Association). Three years for \$5.00.

American Nut Journal Box 124 Rochester, N. Y.

39 STATE ST.



ROCHESTER, N. Y.

American Fruits Publishing Co.

Of Special Interest to the American Nursery Trade

The Whole Subject of Nursery Trade Publicity

By a system exclusively its own, this publishing company covers the American Nursery Trade thoroughly. Advertisements intrusted to its care are published first in the "American Nurseryman," through which they reach subscribers, and then are published in the "American Nursery Trade Bulletin" through which they reach the remainder of the trade. The rate for advertisements covers the double service, on the 1st and 15th each month. Forms close on the 25th.

BETTER THAN ANY TRADE DIRECTORY—Mailing Lists changed daily.

American Nurseryman and American Nursery Trade Bulletin

ALL ADVERTISEMENTS ARE RUN IN BOTH PUBLICATIONS
ABSOLUTELY COVERING THE TRADE

FOR THOSE WHO DO NOT ALREADY KNOW

BUSINESS Announcements in this Chief Exponent of the Trade reach the Nurserymen of every State in the Union. An absolutely independent publication. Edited by the Founder and Dean of Nursery Trade Journalism in America, it continues its pronounced lead in movements which have characterized trade progress for a quarter of a century. Practically every important action on the part of Nursery organizations of the country, national, district and state, has been urged and foreshadowed in the columns of the "American Nurseryman" for months or years beforehand.

That is an unparalleled record. The proof is in print in the files of this journal, open to all.

THE AMERICAN NURSERYMAN, 39 State Street, ROCHESTER, N. Y.

Advtg. \$2.80 Inch CHIEF EXPONENT OF THE NURSERY TRADE Subn. \$2.00 Year
American Nurseryman Advtg. are included in American Nursery Trade Bulletin Monthly

TRADE SENTIMENT

A letter recently received from President Robert Pyle of the Conard & Jones Company says: "Your recent issue serves to reinforce a conviction that has been growing with me that you are alive to the interests of the Nurserymen and sensitive to their needs. I want you to know that some of us appreciate the fact that we have a Trade Journal which may be counted upon to help boost the movements that are for the betterment of the Industry generally."

The D. Hill Nursery Company in a recent letter said: "I am more than ever convinced that the "American Nurseryman," being an independent Trade Journal, is a logical medium which should be dominant in the Nursery Field."

"Your publication is doing a great work. We are all with you."—John A. Young, President, Aurora (Illinois) Nurseries.

Subscription: \$2.00 per year. Three Years. \$6.00

AMERICAN FRUITS PUBLISHING CO.,
39 State St., ROCHESTER, N. Y.

PECAN Nursery Stock

From one of the best nurseries in the pecan belt. Stock furnished in all sizes and all leading varieties.

Special prices to Dealers. Write us for prices.

Flint River Pecan Co.
Albany, Georgia

Member Pecan Nurserymen's Ass'n.

PROFITABLE PECAN TREES

By careful methods of bud selection and culture we grow trees that yield Profitable Nut Crops. This fact is proven in our own large orchards and in the orchards of our customers. Our trees make satisfied customers.

We can supply all standard varieties. Make your reservations early to insure delivery when wanted.

Summit Nurseries
Monticello, Florida.

FILBERT TREES

Barcelona
with pollinizer varieties
PEARCY BROS. NURSERY
SALEM, ORE.

PECAN TREES

100,000 TREES—STANDARD VARIETIES
WE GROW NOTHING BUT PECAN TREES
HIGH QUALITY—SERVICE THE BEST

SIMPSON NURSERY CO., MONTICELLO, FLA.

ORCHARD OWNERS OF THE SOUTH-EAST AND GULF STATES

Reports furnished on pecan and fruit orchards, giving variety, age, size and condition of each tree; also notes on general conditions and needs of orchards. Care and management of orchards a specialty.

HORTICULTURISTS INCORPORATED
6th Floor, Exchange Bank Building
Albany, Ga.

PECAN TREES

Plant them this year! Buy direct from nursery and save agent's profit. All standard varieties; quality and service the best. Write us for prices.

FLORIDA NURSERIES
W. W. Bassett, Prop., Monticello, Fla.



NEW EDITION FREE

A practical guide showing how to bud pecans. Tells how to grow trees 12 inches in diameter by the end of the 8th year, which yielded 400 lbs. nuts per acre.

Trees, Nuts, Groves for sale direct without agent at attractive reduced prices
B. W. STONE, Thomasville, Ga.

SUCCESS

and other leading varieties. Also citrus
BECHTEL PECAN NURSERIES
Ocean Springs, Miss.

AN UNUSUAL OPPORTUNITY

To Purchase
ENGLISH WALNUT GROVE
In bearing. About 14 acres. Located in northwestern Pa.
EDWARD A. SELKIRK, Buffalo, N. Y.

PECAN TREES

We Grow Them Right
We Pack Them Tight
We Price Them Right
Southern Nut Tree Nurseries,
THOMASVILLE, GA.

THIS SPACE

\$2.50 Per Month Under Yearly Contract
Under less than yearly term:
\$2.80 Per Month

PECANS

We are the pioneer growers of budded and grafted pecans in the South. Have a complete stock of the leading standard varieties. Can furnish trees we know will please and give satisfactory results. Catalog free.
INTERSTATE NURSERIES
C. M. Griffing & Co. Props., Jacksonville, Fla.

THE WOODSON PECAN SHELLING MACHINE IS STILL IN THE LEAD

Built and runs like a "Packard", and is in use by over 90 per cent of the Commercial Pecan Shellers in the United States.

Also Manufacturer of the Woodson Automatic
PECAN GRADING MACHINE

There is a reason why 90 per cent of the Commercial Pecan Shellers of the United States use the WOODSON machine.

WRITE FOR CATALOG TO

ROBERT E. WOODSON

Inventor and Manufacturer

3763 Forest Park Ave. St. Louis, Mo.

Nurserymen Should Know

That one of the fastest growing industries in the country is

NUT CULTURE

Demand for information as to Nursery-grown Nut Trees is insistent on all sides. Full information by specialists appears regularly in

AMERICAN NUT JOURNAL

Leading National Publication of the kind

Subscription \$2.00 Per Year

Advertising Rate \$2.00 per inch

AMERICAN FRUITS PUBLISHING CO., Inc.
39 State St., ROCHESTER, N. Y.

AMERICAN NUT JOURNAL --- OCTOBER, 1923

EDITORIAL DEPARTMENT—Communications on any subject connected with Nut Growing and Distribution are cordially invited by the editor; also articles on this subject. We shall be pleased to reproduce photographs of trees of interest, methods and scenes connected with the Nut Industry; portraits of individuals, etc. Suggestions are cordially welcomed.

ADVERTISING—Advertising forms close on the 10th of each month. If proofs are wanted, copy should be in hand on the 1st.

Advertising rate: 20 cents per square line; \$2.50 per column inch for any amount of space.

Advertisements that do not represent reliable concerns will not be accepted.

SUBSCRIPTIONS—The "American Nut Journal" will be sent to any address in the United States for \$2.00 a year; to Canada or abroad for \$2.50 a year. Three years: In United States, \$5.00; Canada, \$6.50.

Add ten cents for exchange unless bank draft, express or postal money order is used.

WHAT THIS JOURNAL STANDS FOR—Reliable information on all phases of the Nut Industry. It is for the advancement of Nut Growing in general; it is in no way confined to the interest of a particular kind of nuts, nor of a particular section. It is broad in scope and absolutely independent. The aim of "The American Nut Journal" is to stimulate thousands of persons into developing interest in one of the greatest food supplies of the future—to line the roadsides and fill the waste places with trees of a sort which yield dollars worth of fruit every year instead of the mere bunches of leaves resulting from present shade and ornamental planting. At the same time it will record the progress of the industry, the latest descriptions in the note book of the biologist and plant physiologist, the rapidly expanding knowledge of methods, the increasing acreage, and in short the news as it develops of an industry whose importance is recognized by an increasing number of persons in all sections.

Entered as second-class mail matter June 6, 1914, at the post office at Rochester, N. Y., under the Act of March 3, 1879.

AMERICAN FRUITS PUBLISHING COMPANY INC.

Ralph T. Olcott, Editor and Manager

121-123-125 Ellwanger & Barry Bldg., Rochester, N. Y.

Classified Business Announcements In This Issue.

Albany Pecan Nut Exchange	Marketing of Pecans.....	79	Nuts as Staple Food.....	Dr. J. H. Kellogg.....	63
Bassett, W. W.....	Pecan Trees.....	62	"Nut Trees for the North".....	Expert Advice.....	63
Bechtel's Pecan Nurseries.....	Grafted Pecan Trees.....	62	Peca Grove For Sale.....	In Clinton, N. C.....	78
Flint River Pecan Co.....	Pecan Nursery Stock.....	62	Pensacola Cooperage Co.....	Pecan Barrels.....	79
Florida Nurseries.....	Pecan Trees.....	62	Pearcy Bros. Nursery.....	Filbert Trees.....	62
Griffing & Co., C. M.....	Pecan Trees.....	62	Scott, F. T.....	Fla. Pecan Grove For Sale.....	79
Hadden, G. E.....	Pecan Grove for Sale.....	79	Simpson Nursery Co.....	High Grade Pecan Trees.....	62
Horticulturists, Inc.....	Southern Pecan Experts.....	62	Selkirk, Edward A.....	English Walnut Grove.....	62
Indiana Nut Nursery.....	Northern Pecan Trees.....	79	Southern Nut Tree Nurseries.....	Pecan Trees.....	62
Inter-State Nurseries.....	Pioneer Pecan Growers.....	62	Spitz, Mrs. Fannie S.....	Patents, Machinery For Sale.....	77
Jones, J. F.....	Grafted Pecan Trees.....	79	Stone, B. W.....	Pecan Trees, Nuts, Groves.....	62
Lancaster Nut Nurseries.....	Northern Nut Trees.....	79	Summit Nurseries.....	High Grade Pecan Trees.....	62
Logical Market Place.....	For Selling Nuts.....	80	Texas Pecan Co.....	Special Announcement.....	79
Manual of Grafting.....	Biederman Method.....	79	Wilco Machine Co.....	Nut Cracking Machine.....	79
Monticello Nursery Co.....	Budded and Grafted Pecan Trees.....	79	Wilkinson, J. F.....	Grafted Pecan Trees.....	79
Northern Nuts.....	Sources Wanted.....	80	Woldert Co., Alex.....	Squirrel Nut Cracker.....	79
"Nut Growing".....	New Book.....	80	Woodson, Robert E.....	Nut Cracking, Grading Machines.....	62
Nut Information.....	Special Topics.....	79			

IMPORTS OF NUTS INTO THE UNITED STATES, FOR CONSUMPTION, DURING THE LAST THIRTEEN YEARS

(Compiled by Bureau of Commerce and Navigation, Department of Commerce, Especially for the "American Nut Journal.")

KIND	1909	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919	1920	1921
Almonds—not shelled.....lbs.	2,120,632	6,810,056	3,762,654	5,242,563	2,363,860	5,501,059	4,684,589	2,368,369	4,901,168	6,149,374	7,482,538	6,460,732	5,068,215
Shelled.....lbs.	8,538,051	10,495,750	12,160,635	11,692,988	12,555,057	13,886,621	12,168,153	13,210,668	19,160,258	21,744,757	28,007,908	18,769,626	21,572,634
Apricots and peach kernels lb.		27,851	13,551	7,939	18,769	18,572	67,161	11,926	250,075			65,175	32,068
Coconuts in the shell.....Dollars	\$1,246,463	\$1,298,970	\$1,704,262	\$2,012,203	\$1,793,713	\$2,150,500	\$1,593,686	\$1,891,328	\$2,583,560	\$2,490,368	\$4,053,282	\$4,230,221	\$2,263,000
Coconut Meat broken or Copra not shelled, desiccated or prepared.....lbs.	23,742,518	20,830,539	38,081,984	61,505,787	54,283,592	44,459,158	88,690,382	108,507,765	247,043,127	430,649,332	258,637,781	215,188,461	189,320,850
Desiccated, shredded, cut or similarly prepared.....lbs.	5,461,602	5,985,308	6,961,850	5,396,465	6,826,095	9,307,924	5,896,806	7,947,390	10,491,796	20,269,909	29,637,674	30,631,029	35,633,497
Cream and Brazil.....bu.	409,644	461,496	277,679	21,601,008	11,933,139	11,431,531	21,483,319	12,499,217	16,230,023	11,282,088	43,076,338	13,035,436	37,102,046
Filberts—not shelled.....lbs.	7,365,837	10,084,987	8,375,860	8,586,278	10,361,072	10,361,072	10,922,248	10,003,552	16,468,547	7,432,524	16,747,349	14,868,364	14,082,336
Shelled.....lbs.	1,384,689	1,413,391	2,332,606	1,368,835	1,450,620	1,798,147	1,722,705	1,259,540	2,280,787	4,245,963	3,778,906	4,711,283	4,233,107
Marrons, crude.....lbs.	10,270,398	9,968,879	14,845,345	10,157,321	18,849,257	12,549,959	15,754,796	6,275,030			5,021,146	29,484,637	23,340,868
Olive nuts, ground.....Dollars	\$580	\$478	\$206	\$312	\$385	\$23	\$23	\$112	\$420			\$133	\$189
Palm and Palm Nut Kernels.....Dollars	\$2,752	\$6,907	\$5,744	\$7,970	\$4,872	\$21,127	\$31,900	\$1,104,885	\$626,435	\$16,905,313	\$5,610,056	\$8,329,034	\$230,194
Peanuts or Ground Beans.....lbs.	7,326,371	11,297,172	11,055,823	12,660,433	12,140,612	17,298,778	14,075,387	9,623,411	7,710,082	1,970,797	5,667,364	7,222,486	4,803,677
Unshelled.....lbs.	1,302,919	16,089,919	7,821,505	3,127,829	7,823,173	21,819,101	11,695,507	18,739,889	27,548,928	67,746,831	24,179,687	103,552,486	36,496,863
Pecans.....lbs.	1,480,289	3,349,460	2,333,037	2,607,227	1,803,434	2,621,161	2,032,539	1,265,382	4,076,933			2,194,680	1,082,390
Walnuts—not shelled.....lbs.	17,432,885	23,269,974	21,146,116	22,208,845	16,363,046	16,134,211	20,988,326	22,610,418	17,177,992	3,304,003	21,235,078	17,330,086	31,821,630
Shelled.....lbs.	8,781,908	10,960,868	11,244,054	10,713,286	10,093,622	11,636,053	10,552,956	13,445,790	12,257,593	9,707,401	10,260,899	13,872,917	18,264,089
All other shelled or unshelled, not specially listed.....lbs.	9,938,337	3,584,544	2,962,663	3,050,989	3,600,068	7,426,313	3,272,492	2,772,589	2,769,634			3,763,973	3,880,676
Total of nuts Imported Dollars	\$8,549,997	\$12,775,196	\$14,265,572	\$15,626,485	\$13,508,307	\$19,815,713	\$16,865,244	\$9,594,431	\$33,697,688	\$49,930,283	\$57,499,000	\$68,752,801	\$37,778,572

Nut Culture Information

Reprint folders on topic discussed in American Nut Journal. 10 Cents Each

Grafting and Budding the Walnut—U. S. Dept. Agriculture.
Pecan Areas of the United States—W. P. Reed.
Pecan Orcharding Instructions—C. A. Simpson.
Walnut Trees For New England—Dr. Robert T. Morris.
Some Walnut Varieties—Dr. L. D. Batchelor.
Chip Buds For Nut Trees—Charles L. Edwards.
Grafting, Budding, Topworking—Dr. W. C. Deming.
Breeding Chestnuts for Disease Control—U. S. Dept. Agr.
Advent of Nuts as Staple Food—Dr. J. H. Kellogg.
Underworking Nut Trees—Charles L. Edwards.
The Ubiquitous Black Walnut—T. P. Littlepage.
Average Yield of Pecan Orchard in S. W. Georgia.
Value of Nuts As Food—Dr. W. C. Deming.
Improved Black Walnut a Good Investment—Henry Stabler.
Status of Pecan Industry—C. A. Reed, U. S. Nut Culturist.
Sources of Supply of Hazel Nuts—Bulletin Imperial Institute.
Top-Grafting the Walnut Tree—Ferd Groner.
Black Walnut As a Meat Producer—Henry Stabler.
\$2,000 an Acre by Top-working Pecan Trees—Stiles.
Outline of Northern Nut Culture Activity—Dr. W. C. Deming.
Establishing the Filbert Grove—George Dorris.
Top-Working Northern Pecan Trees—J. F. Wilkinson.

Nut Trees for Highways and Public Places—W. S. Linton.
American Nut Culture—24-page Pamphlet Survey.
East Texans Reap Fortunes on Pecans.
Hazel Blight—Dr. Robert T. Morris.
Co-operating in Marketing Pecans—William P. Bullard.
Cost and Development Pecan Unit Orchards—J. M. Patterson.
Why Pecan Trees Bear Alternate Years—C. A. Reed.
List of Nut Trees for Northern Planting—W. G. Bixby.
Franquette Walnut Orcharding Pays Well—Turk.
American Nut Industry—C. A. Reed, Nut Culturist.
What Nuts to Plant in Northern States.
Pecan Rosette; Practical Treatment—W. A. Weaver.
English Walnut: Where To Plant It.
Nut Tree Grafting by an Easy Method—Dr. Robert T. Morris.
Purchase of Chestnut Tree With Reference to Blight—G. F. Gravatt.
Quick Results in Pollenizing Pecans—E. E. Rislen.
Nut Trees to Reduce Food Costs—Chas. Lathrop Pack.
How To Guard Against Faulty Nuts—Harvey C. Stiles.
The Romance of the Pinon Nut Industry in New Mexico
Soil Fertility; Fertilizer Problems in Pecan Culture—J. J. Skinner, U. S. Department Agriculture.
The Future of the American Grown Filbert—Richard H. Turk.
The Future of Nut Growing—Dr. Robert T. Morris.
The Lewis Hardy Black Walnut—H. R. Mosnat.
A Woman's Close Study of Pecans for the Table.

AMERICAN FRUITS PUBLISHING CO., 39 State Street, Rochester, N. Y.

Northern Nut Growers Association in Annual Session

THE fourteenth annual convention of the Northern Nut Growers Association was opened in the New National Museum auditorium Sept. 26th, by President James S. McGlennon who in his address cited as problems: Increased membership; improved financial condition; conduct of the Association's affairs from a central office combining the positions of secretary and treasurer. It was recommended that a canvass be made to locate plantings of nut trees the crops from which have brought revenue to the owner, in the belief that such data can be used effectively toward increasing Association membership as showing practical results from Association activity. Also that ways and means be provided for a maintenance fund for aggressive Association work.

W. R. Mattoon, U. S. Forestry Service said that for forestry purposes it was found that black walnut could not well be planted thickly, as pines are planted but that they should be mixed with other forest trees of varying habits of growth; that the black walnut is a heavier feeder than are some other trees. He thought that black walnut should have good soil and that when planted 60 to 100 feet apart for both orchard and timber purposes, results would be highly satisfactory.

A paper by H. R. Mosnat of Chicago, who is specializing in black walnut, directed attention to the great possibilities of black walnut culture especially in the Middle States, both as to nuts and as to timber.

Secretary W. C. Deming was unable to attend the convention. His report was read by the president. Dr. Deming made special report of the period beginning March 1, 1923 when the duties of secretary and treasurer were combined. The Association's funds for current expenses had not been sufficient to meet the demands and it was necessary to use the life membership funds of \$225. Even that had proved insufficient and there was at the date of the convention Sept. 26th, a deficit of \$99.69. H. J. Hilliard, Sound Beach, Conn., volunteered to aid the secretary in his work and thus saved the Association considerable expense. Much publicity work for the Association has been done by the secretary in the way of lectures, etc.; in this work he has been greatly aided by a dozen or more of the state vice-presidents and other members of the Association. To J. F. Jones is due much credit for stimulating interest in membership increases through his offer of nut trees to new members. The Association has long been and still is greatly indebted to Willard G. Bixby for much practical work and for advancing the money needed to defray the cost of the Annual Report. Prof. Neilson, Vineland, Ont., has done splendid work in behalf of the Association and of nut culture generally, in Canada. The Association's accredited list of Nurserymen is out of date; the secretary asks that this be corrected.

Prof. David Lumsden of the Federal Horticultural Board and Dr. L. C. Corbett of the

Bureau of Plant Industry made addresses, the former on exotic species of nuts and the latter on the nut projects of the bureau which maintains a man on the Pacific coast in the interest of almonds and two men in the South in the interest of pecans. The Department of Agriculture is planning intensive work in the interest of northern nuts. Prof. Lumsden spoke of the Chinese chestnut as promising to take the place of the blight-stricken American chestnut; of the value of the black walnut for the Northern states and of the several kinds of filberts, native and imported.

A letter from Secy. J. A. Young, of the Tree Lovers Assn. of America, Aurora, Ill.,



HARRY R. WEBER, Cincinnati, O.
President Northern Nut Growers Assn.

was read, urging a campaign for the planting of "Another Nut Tree."

President McGlennon appointed as committee on nominations Dr. Robert T. Morris, Prof. C. P. Close and himself.

T. P. Littlepage, Washington, D. C., discussed commercial nut planting. If there is anything requiring faith it is probably well illustrated in the case of planting a nut orchard. Faith is required for any undertaking. Faith is the first requisite in nut orcharding. Faith without works is of little avail. Then comes hope and later may come charity. No one knows much yet about commercial nut growing in the North. We often see fields abandoned and city property abandoned because they didn't pay. So we must consider whether nut orchards will pay. If they do, there will be thousands of them.

As the matter is only in the faith stage, the prospective planter must determine what to plant, what the people will buy. They will buy what we see on the fruit stands—pecans, walnuts, hickory nuts, etc.

Then we must know what kinds of nuts will grow in certain sections successfully. We may plant a tree now and then for ornament, etc., but when we consider commercial orcharding we must plant where the nut we have in mind will grow profitably.

You would not think of planting an orange grove in Ohio.

Proposition No. 3 is: Where shall the nut trees be planted? Soil and other conditions must be considered. I find that 90% of pedigree is in the soil. Few of us know what good soil is. The character of the trees to be planted must be carefully considered. The longer we study the matter the farther apart we will plant our trees in orchard. My first rows of nut trees were planted 60 feet apart, my later plantings have been 120 feet apart. I would suggest 100 feet apart. A successful commercial grower must like the work. Great emphasis should be placed on the importance of proper care. If you can care well for only 12 trees, plant only that number. I visited the eight acre nut orchard of A. A. Quarnberg, Vancouver, Wash. It was the most beautiful orchard I ever saw. He is doing there more than is done ordinarily with an orchard of eighty acres.

The man who fails with trees tries to blame others. But undoubtedly he did not plan intelligently and did not proceed on right lines. In my opinion the planter should consult someone who has succeeded in commercial orcharding.

You may ask; Suppose I do all these things: What can I then expect? That is difficult to answer. We believe there ought to be success in commercial nut orcharding. There is a stability, a permanence in the nut tree orchard that is an advantage over a peach orchard. The nut tree is long-suffering. You'll see today the big pecan trees planted by Thomas Jefferson; there are no thriftier trees in the whole forest around. The nut orchard is a permanent proposition.

If you make fundamental mistakes you are set back. You can recover with peach trees in a short time by replanting. But in the case of commercial nut tree planting the kind of tree and the location are of great importance.

With fundamentals looked after I have great faith in commercial nut orcharding. The important thing is to plant nut trees on fundamentally right lines and care for them. I've seen many men who have planted from one to a thousand nut trees. I never saw one who regretted he had planted a nut tree."

Dr. Robert T. Morris—"There is no doubt that it is the practical side of nut culture that is going to lead to the most rapid extension. And advancement is really made by the amateurs. The bolder ones will start the nut orchards in the early days and those who come along a little later with special technical knowledge will develop those orchards to the utmost."

At the Tuesday evening session Mrs. W. N. Hutt, Southern Pines, N. C., delivered an address on Woman's Influence on Nut Culture." Mrs. Hutt is the editor of the Women's department of the Progressive Farmer, Birmingham, Ala. She referred to the use of nuts in cooking, saying that most nuts lose flavor when used in cooking; that the hickory nut retains its flavor, and that the flavor of the walnut is increased by cooking. She emphasized the importance of

publicity in advancing nut culture. Women's aid can be enlisted with marked effect in extending the use and therefore the demand for nuts, said Mrs. Hutt; but it is necessary to bring the subject to their special attention through various forms of publicity—through the newspapers; women's organizations; state, district and national organizations; speakers and articles and demonstrations.

Dr. Robert T. Morris reviewed the principles of grafting nut trees with the use of paraffin wax, a process he originated recently and which he has graphically described in his book, "Nut Growing." He said that wide interest in the subject had been manifested not only over this country but over the world.

From the southern states and from California, in this country, and from Ceylon had come reports that complete success with the process had been prevented by the effect of sun and high temperature on the paraffin. Dr. Morris has been seeking a substance to combine with paraffin (without crystalizing) so that the melting point of the wax will be raised considerably. Carnaba wax has raised the melting point ten degrees but this is sufficient only for certain conditions. Beeswax has been used with more or less success; with this it is desirable to use whitening or white lead to offset the color of the beeswax. In California some success has been attained by snapping a piece of white paper around the graft.

Dr. Morris said he had come to this convention seeking further suggestions and advice. Willard G. Bixby said that the Bixby Blacking company had long endeavored to prepare a wax with a high melting point. In all the experiments it was difficult to overcome crystalization. Beeswax had not been satisfactory. The best results were obtained by the use of candelilla which is produced from sage brush in Texas and Mexico. This is better than carnaba in its freedom from crystalization. It can be obtained from the dealers in wax. But the melting point is not so high as that of carnaba.

C. A. Reed introduced Prof. H. H. Hume, Glen Saint Mary, Florida, Nurseries, who was asked to give results of his experience with grafting wax in warm temperature. Prof. Hume has been in nut work for twenty-five years and is a recognized authority. He said that practically all the top-working his company does is budding work, because the loss from blowing down of grafts was great. The company uses grafting tape or cloth which when put around scion and union will stay until it is cut off. The thing that backs this up is pure pine gum. "We like to get the gum from the trees early in the spring when it is fresh, before it becomes mixed with dirt and leaves. Our mixture is of high grade resin, beeswax and pure pine gum. This withstands a temperature of 120 degrees. You may find a mixture of pure pine gum, beeswax and paraffin satisfactory. Our mixture has no oily effect."

Prof. Hume said he was much interested in the talk by Mrs. Hutt. As to roadside planting of nut trees, or of any kind of trees for that purpose, there were special conditions in Florida to be considered. Road-sides are not fenced in many cases; hogs and cattle roam at will, and there is the problem of fires. Thirty miles of pecan tree roadside planting has recently been done by the Glen Saint Mary Nurseries. That line of work is becoming general in Florida. In the county of Duval in which Jacksonville is located 100 miles of improved roadways

are in process of construction and will soon be ready to be planted. There is such variation of soil and other conditions that in roadside planting diagrams must be made to indicate the kind of tree suited for the purpose, in the case of almost every tree planted. In many cases evergreen trees are preferred for roadside planting.

Prof. Hume's health became impaired recently and he was put by his physician in New York on a spaghetti and French noodles diet, but it was not until milk and pecan kernels were prescribed that he proceeded satisfactorily to recovery.

At the opening of the third day's session, T. P. Littlepage, chairman of the committee on incorporation, reported that all necessary steps had been taken and that the Northern Nut Growers Association, Incorporated, is now the official title of the organization. Advantage was taken of the liberal provisions of the District of Columbia incorporation law. Individual responsibility of members is now merged in corporate responsibility and there are several advantages, among which is the fact that should anyone desire to endow the work of the Association

NORTHERN NUT GROWERS ASSOCIATION, INC.

AN ORGANIZATION for the improvement, cultivation and distribution of native nuts in the Northern United States and Canada. Through discovery, hybridization and experimental orchard tests it is producing choice named varieties of
PERSIAN WALNUTS
BLACK WALNUTS
HICKORY NUTS
BUTTERNUTS
CHESTNUTS
FILBERTS

Demand for these is greater than the supply. Members have expert advice on planting and care of nut orchards—sources of permanent production of high food value.

Fifteenth annual convention, New York City, Sept. 3-5, 1924.

Membership, including the Official Organ, *American Nut Journal*—\$5.00 per year.

H. J. Hilliard, Treasurer, Sound Beach, Conn.

he or she may do so with full confidence that the matter will be upon a permanent basis. At a meeting of the incorporators, Karl W. Greene, A. R. Williams and T. P. Littlepage, on Sept. 28th., the following directors for the first year were elected: J. S. McGlennan, W. C. Deming, W. S. Bixby, H. R. Webber, Robert T. Morris. The existing by-laws were adopted as those of the corporation.

C. P. Close, of the committee on nominations reported suggestions for officers as follows:

President—Harry R. Weber, Cincinnati, O.
Vice-president—J. F. Jones, Lancaster, Pa.
Secretary—Dr. W. C. Deming, 983 Main St., Hartford, Conn.

Treasurer—H. J. Hilliard, Sound Beach, Conn.

Upon motion of W. G. Bixby, the Association voted to make the annual dues \$5.00, this amount to include the receipt by the member of the official journal, the *American Nut Journal*, for the year; and notice of intention to change the by-laws to this effect at the next annual meeting was given. Dr. Deming, Mr. Bixby and Dr. Morris were named a committee to provide with Mr.

Littlepage's assistance, a corporate seal.

It was decided to hold the next annual meeting in New York City, Sept. 3-5, 1924. Opportunity will be offered for visiting the nut plantations of W. G. Bixby, Baldwin, N. Y., and Dr. Robert T. Morris and Dr. W. C. Deming in Connecticut.

On the last day attention was given to several addresses:

"Uses of Nuts by Aboriginal Indians"—Dr. W. E. Safford, U. S. D. A., Washington, D. C.

"Notes from Experimental Nut Orchards"—W. G. Bixby, Baldwin, N. Y.

"Roadside Planting vs. Reforestation"—William S. Linton, Saginaw, Mich.

"The Fertilizer Project and Nut Culture"—Dr. Oswald Schreiner, U. S. D. A. Washington, D. C.

"Why I Am Planting Nut Trees in Maryland"—Dr. Llewelyn Jordan, Washington, D. C.

In the absence of a committee on resolutions Mr. Littlepage moved a vote of thanks to Mrs. Hunt for coming a long distance and for interesting and instructive address, to Dr. Morris, Mr. Linton, Mr. Ellis and all the others for aiding the work by their presence; also to the president for his courteous treatment of all the proceedings.

Among those present were: T. P. Littlepage, Washington, D. C.; Zenas H. Ellis, Fair Haven, Vt.; Dr. G. A. Zimmerman, Picketown, Pa.; C. A. Reed, Pomologist, Washington, D. C.; Willard G. Bixby, Baldwin, N. Y.; John M. Hershey, Berks, Pa.; P. H. O'Connor, Bowie, Md.; Dr. L. C. Corbett, Washington, D. C.; Ammon P. Fritz, Ephrata, Pa.; Mrs. W. H. Hutt, Southern Pines, N. C.; Dr. John E. Cannady and wife, Charlottesville, Va.; James S. McGlennan, Rochester, N. Y.; Mrs. B. W. Gahn, Washington, D. C.; Ralph T. Olcott, Rochester, N. Y.; K. W. Greene, Washington, D. C.; Dr. Robert T. Morris, New York City; W. R. Mattoon, Prof. David Lunsden, Dr. M. B. Waite, Dr. W. E. Safford, Dr. Oswald Schreiner, G. F. Gravatt, Dr. Llewelyn Jordan, Washington, D. C.

J. M. Richardson, Stormville, N. Y.; Franklin Weems, F. H. Leggett & Co., Washington, D. C.; Jacob E. Brown, Elmer N. J.; Alfred V. Wall, 2305 W. Lawvale St., Baltimore, Md.; Prof. H. H. Hume, Glen Saint Mary, Fla., Nurseries; Prof. C. P. Close, Washington, D. C.; Henry Stabler, Hancock, Md.; Mrs. T. P. Littlepage, Washington, D. C.

W. G. Slappey, Tacoma Pk., D. C.; S. M. Ammon, Bureau of Standards, Washington, D. C.; Alfred Heine, Bowie, Md.; P. H. Hartshon, Albert R. Williams, Washington, D. C.; Mr. and Mrs. William S. Linton, Senator and Mrs. Penney, Saginaw, Mich.

Exhibits

By T. P. Littlepage, Washington, D. C.—European chestnuts; O'Connor walnuts, hybrid, probably Persian and black, from tree discovered by P. H. O'Connor, near White Marsh, Md., mixture of varieties of European filberts; cluster of "Indiana" pecans; American hazel nuts.

By J. F. Jones, Lancaster, Pa.—Hall, Eureka, Lancaster walnuts; Rush hazel; Niblack, Busseron, Posey pecans; Wiltz Mayette and Meylan English walnuts; eighteen plates of Voollertsen filberts and Daviana, Barcellona, and Du Chilly filberts.

By Willard G. Bixby, Baldwin, N. Y.—Lancaster heartnuts; Royal walnuts; Hall Persian walnuts; Rush Persian walnuts.

C. P. Close, College Pk., Md.—Elady Persian walnut (25 degrees below zero) seedling filbert from N. J.; hybrid chinquapin by Littlepage—Spanish chest.

Convention Sidelights

Secretary Deming was greatly missed. For more than a decade he has personally directed the smooth operation of Northern Nut Growers Association, Inc., affairs "in and out of season"—that is to say at convention time and ad interim. In order to make sure of his attendance next year the Association determined to flop down right in his door yard.

C. A. Reed, T. P. Littlepage and W. G. Bixby joined in looking after convention de-

(Continued on page 71)

National Pecan Growers Association in Annual Session

PROGRAM

Tuesday, 10:00 A. M.

1. Invocation: Dr. Lindsay E. McNair, First Presbyterian Church, Jacksonville, Fla.
2. Address of Welcome: Hon. John L. Alsop, Mayor of Jacksonville.
3. Response: Ralph T. Olcott, Editor American Nut Journal.
4. President's Address—C. A. Simpson, Simpson Nursery Co., Monticello, Fla.
5. Secretary's Report: J. Lloyd Abbot, Horticultural Development Co., Spring Hill, Ala.
6. Budding, Grafting and Top-Working: B. Szymoniak, Horticulturist, Hammond, La.
7. Pecan Trees for Shade and Roadside Planting: H. H. Simmons, Jacksonville, Fla.
8. The Effect of Removing Tops Out of Pecan Trees: J. C. Britton, Albany, Ga.
9. Combination of Summer and Winter Cover Crops: B. W. Stone, Nurseryman, Thomasville, Ga.

Tuesday, 2:30 P. M.

10. Why We Fertilize: R. W. Ruprecht, Chemist, Agricultural Experiment Station, Gainesville, Fla.
11. What Florida is Planning To Do for the Pecan Industry: Wm. Newell, Director College of Agriculture, University of Florida, and Agricultural Experiment Station, Gainesville, Fla.
12. Practical Method of Developing a Com-

mercial Pecan Orchard: J. B. Wight, Cairo, Ga.

13. The Culture of Bearing Orchards: J. S. Wight, Wight Nursery and Orchard Co., Cairo, Ga.
14. Intercrops for the Pecan Orchard: R. C. Berckmans, Horticulturist, Macon, Ga.
15. Nitrogen as an Essential to Fruit and Bud Formation: Prof. T. H. McHatton, Horticulturist, State College of Agriculture, Athens, Ga.
16. Management and Fertilization of Pecan Soils: J. J. Skinner, Biochemist, Soil Fertility Investigation, U. S. Department of Agriculture, Washington, D. C.
17. The Pecan in North Carolina: O. D. Matthews, State Horticulturist, Raleigh, North Carolina.

Tuesday, 8:00 P. M.

18. Informal Reception and Dance.

Wednesday, 9:30 A. M.

19. Bearing Records of Commercial Orchards and Profits Received, Statistics by Year and State, of Pecan Yields, and for Five and Ten Years Hence: L. A. Nevila, Horticultural Editor, The Progressive Farmer.
20. Scab Control: J. B. Demaree, Assistant Pathologist, U. S. Dept. of Agriculture, Thomasville, Ga.
21. The Value of Pecans in the Diet: Miss Agnes Harris, Dean of Women, Auburn, Ala.
22. The Value of Agricultural Education:

C. A. Cobb, Editor Southern Ruralist, Atlanta, Ga.

23. Question Hour.

Thursday, 9:30 A. M.

24. Basic Phosphate in Pecan Orchards: S. D. Nance, Tennessee Coal, Iron and Ry. Co., Birmingham, Ala.
 25. The Farm Bureau and its Value to the Farmer: Edward A. O'Neill, President Alabama Farm Bureau Federation, Montgomery, Ala.
 26. Best Varieties for Planting in Each District of South and Soil Required by Each: C. A. Reed, Nut Specialist, U. S. Dept. of Agriculture, Washington, D. C.
 27. The Pecan Industry in the West: G. H. Blackmon, Pecan Cultivist, Florida Experiment Station, Gainesville, Fla.
 28. Question Box.
 29. Reports of Standing Committees for 1923.
 30. Report of Committees on Resolutions, Time and Place and Nominations.
 31. Election of Officers and Other Routine Business.
- All sessions will be open to the public.
- Thursday afternoon 2:30 p. m. automobile ride will be given to Pecan orchards of H. H. Simmons and D. G. Hailey and to the famous Pablo and Atlantic beaches.

Friday

Excursion to Tampa (probably leaving Jacksonville Thursday night), to study first-hand the operations of the Florida Citrus Exchange.

PRACTICAL topics of great interest to pecan growers were discussed at the 22nd annual convention of the National Pecan Growers Association in Jacksonville, Fla., Oct. 2-4. A program which gave evidence of taxing the available time of the three days had been prepared, but in the experienced hands of President C. A. Simpson it was disposed of, session by session, with remarkable conformity to the daily schedule. Only the fact that some on the program were not on hand when called for prevented entire compliance with the prepared outline.

Secretary J. Lloyd Abbot reported a small balance in the treasury and a membership of 370.

A. S. Perry announced that souvenir books illustrating the ceremonial dedicating the oldest pecan tree in Georgia, at Cuthbert recently as described in the Journal had been prepared and that a copy would be presented to each person attending the convention. He presented the first copy of the occasion to Mayor Alsop, of Jacksonville.

H. H. Simmons' paper as listed above aroused some discussion. Mr. Simmons argued that because of the impracticability of fertilizing, spraying and generally caring for pecan trees planted on roadsides such planting was not practicable. President Simpson said he had found that the pecan tree could be used with good results on roadsides. B. W. Stone agreed with Mr. Simmons. "If a city adopts the plan generally," he said, "all right; but if not, I have found that the planting of nut trees on roadsides constitutes a nuisance by reason of concentrating attention at one point."

R. B. Small—"I think that fruit or nut trees on roadsides constitute a menace to the morals of a community."

Mr. Simmons—"They certainly entail a great expense for upkeep."

J. M. Patterson—"I offer this resolution: The members of the National Pecan Growers Association do not consider pecans adapted to roadside planting unless legislation has provided for their care and maintenance."

R. L. Scott—"I think we ought to forget roadside planting of pecan trees. The practice would result in neglect which would be a disgrace to the pecan industry."

Mrs. Banning—"We do want roadside

pecan planting, but first we want legislation for the care of such trees."

Robert C. Berckmans—"First let us legislate and then let us educate the boys and girls as to the use of such trees."

Mr. Patterson's resolution was adopted.

What Florida is planning to do for the pecan industry since the last legislature appropriated \$7,500 to be used for experimental work in pecan culture was told by Ed. L. Ayers, agriculturist of the Florida agricultural experiment station, Gainesville, in the absence of Dr. Wilmon Newell, director of the college of agriculture, University of Florida, who, through Mr. Ayres, expressed his regret at not being able to be present.

Mr. Ayers said the Florida Agricultural Experiment Station has felt for a long time the need of definite and conclusive experimental work along a number of phases of pecan culture but has been able to do practically nothing because of the inadequate appropriations. The only work of note was that of H. Harold Hume, he said.

The last legislature, due to the efforts of the president of the association and other prominent growers, made an appropriation of \$7,500 per annum for the next two years to be used for experimental work in pecan culture. As soon as this appropriation became available the first problem was to find a suitable man to lead the work and G. H. Blackmon, of Waxahachie, was employed because of his training and experience with the pecan.

Now Florida is planning to secure through the members of the association all the available information regarding varieties and fertilizers to be handed on to those who are just beginning, in order that they may profit by the experience of those engaged in the industry; to obtain all possible information on successful varieties in various sections of the state and to establish a variety orchard on the experiment station grounds at Gainesville; to establish and maintain co-operative experiments on fertilization with growers in all sections of the state; to determine schedules and formulas for proper fertilization of the groves; to establish and maintain co-operative experiments to determine the most successful spray schedule in various sections of the state; to try out numerous types of nuts as root stock by

means of tests on the station grounds at Gainesville and to carry on propagating work.

J. B. Wight, in his address on the development of a pecan orchard, said that from an orchard 15 years old and upward, well cared for, a net average yearly income per acre could reasonably be placed at \$100. This is based upon an average yield of 600 pounds to the acre which should sell at 25c per pound. Cost of care, cultivation, etc., as outlay is taken into consideration.

Mr. Patterson said this estimate is interesting. "I'd like to know how many grower; at this convention have measured up to this," he said. Upon the call of the chair for response to this inquiry Messrs. Phillips, Smithwick, Bechtel and Wight arose.

Then Mr. Patterson proposed the query: Have any members produced 600 pounds or more per acre from trees younger than 15 years? Four arose.

Mr. Snedeker said he had trees younger than 15 years that had produced more than that amount during the last three years, and the record was applauded.

In his discussion of measures for the control of scab Mr. Demaree said he had not found that dusting was effective. The Stuart seems to be immune to pecan scab; the Delmas is very susceptible; but the scab does not affect the Stuart when these varieties are planted together.

J. Slater Wight found that four applications of 3-3-50 Bordeaux gave 90% control, while unsprayed trees showed as low as a total loss of crop. Mr. Snedeker emphasized the importance of the subject. The problem, he said, is growing more serious. It has been thought that excessive moisture had something to do with it; yet in the most favorable, dry season the scab had been the worst. "We are meeting new problems and new phases of the problem. What are we to do? Have we immune varieties? Varieties which may seem to be immune in one section are not so in another section." Mrs. Banning said that there was no scab on her Russell pecan trees which, by the way, are her most satisfactory trees.

G. H. Blackmon, formerly of Texas, now in government work in Florida, said that in Texas named varieties are being planted in considerable quantities in the Dallas, Waxahachie, Winona, San Antonio, Stephenville

sections. Mr. Butterfield, Winona, Tex., has a large thrifty grove. Pecan varieties successful in the Southeast are not successful in the Southwest, and vice versa. Much top-working of native pecan trees is being done. Trees 8 to 10 inches in diameter are used. Mr. Blackmon says Texas has the nut case bearer, but that Texas growers believe they will control it by spraying. They use the liquid sprays, the spray gun and high pressure. He believes that the nut case bearer is oftener the cause of pecan crop failure in Texas than is climatic condition. A parasite working in cycles of about three years is doing much to control the case bearer. The recommendation of the College of Agriculture is to spray with three pounds of arsenate of lead to 50 gallons of water.

In response to a query by Mr. McManus, Mr. Blackmon said that "honey dew" is caused by aphids which can be controlled with Blackleaf 40 and soap.

Mr. Waughtel inquired why a pecan tree in a fence corner, apparently entirely neglected, will often be found bearing a fine crop of nuts, while a pecan tree nurtured in orchard does not do well. Mr. Bechtel assured Mr. Waughtel that it will invariably found that the tree in the fence corner is receiving much sustenance from chicken yard, cow yard or kitchen yard.

Mr. Small asked Mr. Demaree if there were any virtue in spraying poison on the ground beneath a tree with the expectation that the tree would absorb the poison and so kill insects on the tree. He said he asked the question because he knows a man who claims to have killed the boll weevil on cotton by spraying poison on the ground beneath the cotton plants. Mr. Demaree thought that if the tree should absorb enough poison to kill insects on the tree, the tree itself would be killed.

Mr. Snedeker—"I want to ask for a scientific answer to a question: A tree doctor has been operating around Waycross, Ga., he gets a good price for his work. He bores a hole in a tree with an auger and inserts quinine. The development of the tree is remarkable. Why is it?"

Mr. Demaree—"That's a question for a chemist."

Mr. Ayres—"In Florida crystals of blue-stone have been so inserted in citrus trees and marked stimulation of tree growth has resulted."

President Simpson—"It is claimed that calomel so inserted in a pecan tree will produce good results."

The chair appointed as an auditing committee: Messrs. Stone, White and Scott.

PECANS IN THE DIET

The talk by Miss Agnes Harris, Auburn, Ala., on the value of pecans in the diet was very instructive. Miss Harris said the main fact that she desired to emphasize was that the pecan had been found to be rich in protein and fat and the best substitute for meat. It has a high co-efficiency of digestibility. It has been, and is now, too largely considered a luxury and should be a more definite part in diet, she said.

The California experiment station, continued Miss Harris, carried out dietary studies which proved that a considerable quantity of nuts, properly eaten, do not cause discomfort. Cajori, a Japanese, working at Yale university, by experiments proved that pecans and a few other nuts contain vitamins that are essential for normal nutrition.

Miss Harris urged that the National Pecan Growers' Association lend its influ-

ence toward securing a greater amount of research work on problems relating to the dietary value of nuts. The extension service of the South must work with the women and the girls upon improving food habits, she said. "These women need to have a greater amount of scientific data to give greater emphasis to the increasing uses of the pecan."

CO-OPERATIVE MARKETING

The co-operative marketing feature of the program occupied most Wednesday's afternoon session and was continued into the night meeting. It had been arranged to place before the pecan growers in concrete form lessons learned by grapefruit and orange producers who for many years have marketed their crops co-operatively through the Florida Citrus Exchange.

The discussion was introduced by H. Guy Nickerson, a prominent Polk county grower, who graphically described the conditions in the citrus industry in Florida preceding the organization of the exchange. Mr. Nicker-

In taking the office of president of the National Pecan Growers Association, J. M. Patterson made a strong plea for harmony in the ranks of the pecan growers, and declared that it would be his firm and devoted purpose to serve the industry as a whole, and not any faction or part of the industry.

He urged a campaign of national advertising to promote the pecan industry.

He advocated the classification of pecans, declaring that only choicest nuts should be sold in the shell, and that the small and off-grade ones should be cracked and the meat vacuum-packed or sold in bulk.

He pledged his best efforts to building up the industry, and expressed the hope that the day was not far distant when there would be one strong central organization of all the pecan growers in the country.

son emphasized strongly the stabilization of grapefruit and orange growing which has accompanied the development of the co-operative marketing agency as shown both in crop values and land values.

That the fundamental of any successful co-operative effort is the degree to which the growers making it are sold on the idea and maintain activity in direction of their own affairs, was forcibly brought out by the second speaker, H. G. Gumprecht, of Bradentown, manager of the Manatee County Citrus Sub-Exchange. Mr. Gumprecht mentioned numerous instances which conclusively show the capacity of agricultural producers to market their crops intelligently and efficiently. He described in some detail the form of organization of local citrus growers associations, territorial sub-exchanges and the central offices of the Florida Citrus Exchange.

George A. Scott of Tampa, general sales manager, gave an interesting outline of the manner in which the good will and active support of the trade has been secured for the Sealdsweet fruit marketed by the Florida Citrus Exchange. Mr. Scott's long and varied experience enabled him to give a helpful talk along the lines indicated, of application to the problems of pecan growers. Jefferson Thomas of Jacksonville, followed with brief remarks on the Sealdsweet advertising.

L. M. Rhodes, state marketing commissioner of Florida portrayed the rapid growth of the co-operative idea in the marketing of agricultural products and stressed strongly the splendid opportunity presented the pecan growers to firmly establish their industry at an early stage in its history through a policy of profiting by the experiences of the past. A number of appropos stories enlivened Mr. Rhodes' remarks and he was warmly applauded.

Immediately following the banquet which featured the evening session of the convention, C. E. Stewart, Jr., of Tampa, Fla., business manager of the Florida Citrus Exchange, talked on Co-operative Marketing, its Alpha and Omega, the fundamentals, the difficulties, the successes, the ultimate aim and the outlook. Mr. Stewart's remarks were of a practical and business-like character and showed his grasp of the work which is in his charge. His description of the essential differences between corporation and co-operative methods was particularly well received.

The last speaker under the co-operative marketing section of the program was Karl Lehmann of Orlando, secretary of the Orange Chamber of Commerce. In his customary logical and eloquent manner Mr. Lehmann traced the connection between co-operation on the part of the agricultural and horticultural interests and the upbuilding of community life and increase in population and wealth.

BEST VARIETIES OF PECANS

The opinions expressed by Mr. Reed in his paper on best varieties of pecans were indorsed by Prof. Hutt. Mr. Stone said that Mr. Reed's ideas are of great value to inexperienced planters. "I would put Success at the head of the list," he said, "but with the observation that it is an intensive variety and requires an abundance of food and care. If you to plan to plant them like Small does and never fertilize them, you'd better let Success alone."

Mr. Small—"Success is one of my best varieties."

Mr. Stone—"Mr. Reed says Moneymaker does not fill well. But if this tree is fed properly it will fill well. A Moneymaker in a poultry yard, that I know of, illustrates by its heavy crops the value of fertilizer."

Mr. Small—"The Big Four are all right if we can determine what constitutes the list. My selection would be: Stuart, Success, Schley, Mobile. Mine is a clay sub-soil."

J. Slater Wight—"I am with Mr. Reed in his introduction. I am like Mr. Stone in regard to Moneymaker. Dr. L. H. Bailey when I was at Cornell cautioned against planting Ben Davis apple regarded as of poor quality though good appearance. But I found that the Ben Davis was being grown in great quantity because it is a profitable seller. So it is with Moneymaker pecan. We have had to judge on a basis of profit. Varieties like Moneymaker and Moore though bringing a lower price per pound, more than make up in returns because of consistent bearing quality. Purchasers of pecan trees ask what kinds produce the greatest market returns in nuts. Moore and Moneymaker can be put on the market before Thanksgiving—that is what is wanted. In a variety test at the Georgia Experiment Station over a period of 16 years Moneymaker was most profitable."

Mr. Phillips—"The trees that produce the most profit in my Georgia orchard are the Teche and Mobile. I wish all my trees were of those varieties."

Wm. P. Bullard—"I attended in May the

National Association Convention—Continued

meeting of the Texas Pecan Growers Association and saw that growers of Texas gauge varieties on percentages of kernels shelled out. One grower said he would not handle a pecan that would not crack out 50% of kernel. Buyers buy pecans there on the percentage of kernel. Selection of varieties should in my opinion depend upon location of orchard. The planter should consider what varieties can be grown where he proposes to plant and what the buyer wants. Now what does the trade want? I've just returned from New York, Philadelphia and other cities where I talked with buyers of pecans. Pecans are not displayed there by varieties. They are shown along with almonds, walnuts and other nuts. We've got to grow for size to suit the market. It does not seem practicable to try to educate the buyer and the public in the matter of varieties. If I could secure crops year in and year out I would grow the Mobile because of its size. I was asked by the buyers to supply large pecans. If I could produce Schley in regular crops and without scab I'd grow it. One man in New York who has a series of nut stores in the metropolis and is an artist in window and store display has bought 80,000 pounds of Schley pecans at 60 cents a pound. He wants only Schley pecans."

WHAT THE CONSUMER WANTS

Elam G. Hess—"The variety of pecan that the consumer wants to eat is the kind to grow. There is a great difference in the quality of the kernel regardless of the size of the nut. The pecan most widely known is the Schley. It leads in compactness, richness and delicious flavor. It goes in barrel lots to the consumer. Some buy whole barrels of Schley for their own tables—not millionaires, but well-to-do people. Let us select the varieties that will stand in the future—15, 20, or even 100 years from now. The Schley has created a ready market. If we grow the Stuart, a hard shell nut, we will not get the returns we want. It is not so much what the industry will do today."

Mr. Snedeker—"My friend from Washington has started something. He is shrewd in his surmises. Mr. Hess is living in the future, yet I suppose he's looking for the Mighty Dollar right now in the present time, like the rest of us. When we consider both the present and the future, we will seek that which will produce the most profit at the least expense. I believe the best posted growers here today know that the pecan market is drifting rapidly into demand for whole kernels rather than nuts in the shell. Things that count are cracking quality and the number of pounds of kernels per tree—and that is not size. It's a wasteless use of breath to talk varieties, because when it comes to conclusions each of you will select for yourself, though your choice may not agree with that of others."

Mr. Reed—"I see from this discussion of varieties that we're with the last man who talks. You started out as being for me in this matter. I do not know where you are now." [Laughter and cries of "We're still with you."] A few years ago I had the conception that the pecan required a fertile soil for best results. Yet Mr. Simmons this week has taken me to his grove and given me the surprise of my life. Imagine drifting sand and almost barren waste and then view soil conditions a little bit worse than your imagination when you see land on which Mr. Simmons is producing crops of pecans in good returns. There is no hard pan, the

roots can go down as far as they will. Eight feet down there is all the water needed."

Mr. Bechtel—"Mr. Reed says he learns something every year. I notice that he even gives the Success pecan due recognition. This and other varieties can be grown successfully by using plenty of fertilizer, securing mellowness and depth of soil and good drainage—water not nearer than five to six feet below the surface in dry time."

Mr. Bullard—"We put Schley ahead of every other variety of pecan in our advice to planters. But we advise consultation with state and federal experts as to conditions to be met by the planter in each case. We advise the planter to have regard to size of nut unless he is going in for cracking purposes."

President Simpson announced that the treasury needed replenishing in order to



J. M. PATTERSON, Putney, Ga.

President Patterson of the National Pecan Growers' Association, was raised on a Western farm and after long experience in the insurance business in Chicago he was won back to the farm by pecans. He is the leading figure in the pecan industry, the president and manager of the Paper Shell Pecan Growers Association, Putney, Ga., the largest producer of pecans in the world; the crop under his management this year being estimated at 600,000 pounds. Mr. Patterson is identified actively with several commercial institutions.

provide for the printing of the proceedings. He called for volunteers to advance the price of ten memberships each, the one so volunteering to procure that many new members at \$2 each and thus reimburse himself. A. S. Perry was asked to conduct this work and Secretary Abbot was asked to record the names of the volunteers. The response was prompt. Among those who advanced the price of ten memberships are: A. S. Perry, A. Clarke Snedeker, Simpson Nursery Co., Jefferson Thomas, Monticello Nur. Co., Elam G. Hess, J. B. Wight, Theo. Bechtel, H. H. Simmons, B. W. Stone, Summit Nurseries, E. O. Painter Co., Lilly Orchards, Graham & Boswell, Woodson Pecan Shelling Machine Co., R. B. Small, Mrs. Banning, J. Lloyd Abbot; a Jacksonville pecan dealer, National Pecan Growers Exchange (20), Southern Pecan Growers Association, National Pecan Groves.

Resolutions thanked the Jacksonville people, the local committee of which Mr. Simmons was chairman, Mrs. Watson, Mrs. Hutchinson, the Chamber of Commerce, the local press, the manager of the Hotel Seminole, the Federal and State Agricultural department representatives, the citrus organi-

zations' members and officers who took part in the convention, and others for aid and courtesies extended in contributing materially to the process of the convention.

The incoming president was requested to appoint a committee of women to encourage research work in behalf of greater use of pecans as food.

OFFICERS AND MEETING PLACE

The report of the committee on time and place recommended Cuthbert, Ga. the first week in October 1924. Cuthbert was the only place proposed. The report was adopted and time and place for the 1924 convention of the Association were thus fixed.

The committee on nominations recommended election of the following officers:

President—J. M. Patterson, Putney, Ga.
Vice-Presidents—E. C. Butterfield, Winaona, Tex.; Clifton Kirkpatrick, Selma, Ala.
Secretary—J. Lloyd Abbot, Spring Hill, Ala.

Treasurer—J. Slater Wight, Cairo, Ga.
Executive Committee—A. Clarke Snedeker, Waycross, Ga.; B. W. Stone, Thomasville, Ga.; J. B. Wight, Cairo, Ga.; Theo. Bechtel, Ocean Springs, Miss.; Mrs. Thomas A. Banning, Robertsedale, Ala.

The officers were elected unanimously by a rising vote. Neither Mr. Butterfield nor Mr. Kirkpatrick was present. At the request of the chair President Patterson was escorted to the platform by Mr. Bechtel and Mr. Small and formally announced. Upon receiving the gavel while all the members rose, President Patterson said:

"I desire to express my profound appreciation of the honor you have conferred upon me. My one desire is to be worthy of this honor; that I may be given strength and wisdom to continue my efforts to contribute to the interest of this Association and to the pecan industry generally.

"When a president of the United States is elected he is chosen by his party. After his election he forgets party affiliation and becomes the President of the entire people. There are no political parties in this Association. The members may have honest differences of opinion. I know no parties in this Association from this time on in my administration. [Applause].

Year by year our membership is increased. The average of intelligence and business ability of the membership is high. We have a wonderful industry. There are comparatively few insects and diseases to be combated. We used to have the rosette; we have forgotten it. I hope it may be the same with the scab and the case-bearer.

"The chief question before the Association at the present time is the marketing of pecans. It is almost wholly in the chief centers of population at present that the large consumption of pecans is found. The great Middle West and the Far West hardly know the paper-shell pecan. When I visit the big buyers of nuts they say: 'Mr. Patterson, you have in the pecan unquestionably the best nut. The problem now is to place it on the market at a price which the public can pay.' The pecan is and will be the first choice in nuts when the public can afford to buy it.

"My program for the coming year's activities of the National Pecan Growers Association is:

"One great central pecan marketing agency.

"A national publicity campaign, similar to that conducted by the citrus interests. This we cannot put over if divided into camps and when two-thirds of the growers are independents. All should contribute to a big fund to put the pecan on the map.

"Keep off the market the smaller or low grade pecans. Let these be shelled, packing the kernels, providing for a year-around

market. There is no question about it; we have the quality nut. Let us keep the standard high.

"That is my program. I believe we can work it out. If we all hold together it can be worked out a great deal quicker."

Mr. Small—"I am much interested in your program, Mr. President. But it is not a one-man job. The aid of the members of this Association is needed. I move that this Association indorse the President's program as outlined." Unanimously carried.

Upon the suggestion of the committee on nominations the president will appoint state vice-presidents. The list which has been in use for some time is much out of date.

Upon motion of Mr. Small the Association made special recognition of the able manner in which President Simpson presided at all the sessions and congratulated him upon completing the heavy program as arranged.

Upon motion of Mr. Stone the Federal aid committee was requested to continue to serve the Association. It has done excellent work.

It was reported that special work in attempting to control the ravages of the pecan case-bearer is in progress at Thomasville, Ga., under the direction of Mr. Gill of the U. S. D. A., who will advise the members as soon as effective measures have been devised.

Mr. Bechtel suggested appointment of a committee on ethics. The Association has had such a committee but its appointment from year to year has not recently been in practice. It is believed that it will prove very useful upon occasion. The president will give the matter his consideration.

At this point Jefferson Thomas started in to talk about something. When he became exhausted Mr. Snedeker engaged the attention of the members. Mr. Thomas said he arose to a question of privilege. Mr. Snedeker appeared to be talking on the good of the order. But neither gentlemen seemed to be saying anything. Meantime the audience was expecting sine die adjournment. Suddenly Chairman Simmons of the local committee appeared at the convention hall entrance and beseeched Mr. Snedeker to "talk a little while longer."

This Mr. Snedeker obligingly did. Finally Mr. Simmons ushered in a troupe of entertainers whose expected arrival had been delayed, and Mr. Snedeker sat down amid bursts of applause—for the entertainers.

Upon motion of Mr. McManus a rising vote of appreciation for the excellent work of Mr. Simmons' entertainment and arrangement committee. The convention then adjourned.

President Simpson's Address

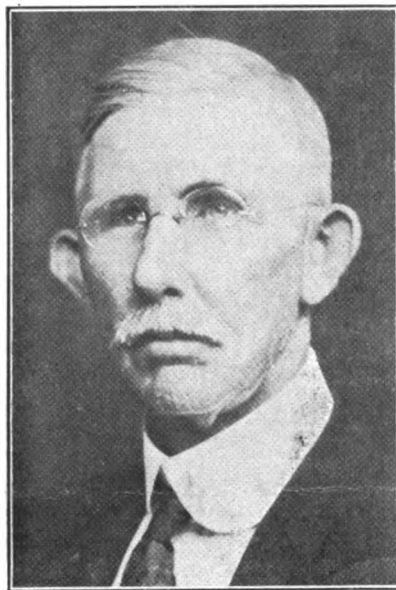
In his annual address President Simpson said two big problems still remain unsolved, how to put the most pecans on the trees and how to sell them to best advantage co-operatively. He said he did not believe there was a bearing pecan orchard today that has received the scientific care it should have to make it produce the greatest amount of nuts. Trees must be given the best of care from the beginning. In fact it would be much better if a crop or two of velvet beans or cow-peas were turned under before the trees are planted.

President Simpson said from facts at hand a large percentage of the growers do not realize the importance but continue to dump their nuts on the market in true farmer style. But even the farmer is now seeing the light and is selling his cotton and pea-

nuts through co-operative selling organizations and in fact will soon be selling all his farm products that way because he is being shown how he can get more money for his cotton and peanuts by so doing.

The owner of a pecan grove has intelligence above the average farmer in every way except in most important things of co-operation. Everyone who produces a pecan and even those who have orchards not yet in bearing, should be a member of a co-operative selling organization. If after hearing the papers presented at the sessions on what the citrus growers of Florida have had to contend with in the past dark years, and of their present successful organization, the Florida Citrus Exchange, the members do not see the absolute necessity of being a member of a co-operative selling organization, he would have to admit the pecan grower has not the intelligence and foresight of the average farmer.

President Simpson concluded by stating



CLIFTON KIRKPATRICK, Selma, Ala.
Second Vice-President National Pecan Growers Association

The new second vice-president of the National Pecan Growers Association, Clifton Kirkpatrick, is one of the prominent business men of Alabama and has long been a leader in the affairs of his home city, Selma, and of the central part of the state. He is familiarly known as "The Duke of Cahaba" in honor of the old capital of the state. Mr. Kirkpatrick's interest in matters horticultural and agricultural is shown by the fact that he is president of the Alabama Pecan Growers Association and of the Alabama Horticultural Society and a member of the State Board of Agriculture, representing especially the horticultural interests. He has large pecan groves.

that more pecans and more members in a co-operative selling organization should be the every day slogan of the growers' association.

Those Present

Those who registered at convention headquarters on the first day were:

E. L. Ayres, representing the agricultural experiment station, Gainesville, Fla.; N. C. Alston, Richland, Ga.; J. Lloyd Abbott, Spring Hill, Ala.; Mrs. Thomas A. Banning, Robertsedale, Ala.; G. H. Blackman, Gainesville, Fla.; R. C. Berckmans, Macon, Ga.; E. L. Bryant, Jacksonville, Fla.; W. P. Bullard, Albany, Ga.; E. C. Clarke, Orange Park, Fla.; Mrs. J. H. Carradine, Lawtey, Fla.; J. H. Carmichael, Kathwood, S. C.; E. W. Cole, Magnolia, Springs, Ala.; J. B. Demaree, Thomasville, Ga.; J. H. Fullilove, Shreveport, La.; E. M. Freer, Jacksonville, Fla.; A. C. Felton, Jr., Macon, Ga.; B. F. Fleming, Enterprise, Ala.; C. A. Graham, Moss Point, Miss.; George H. Glass and wife, Cuthbert, Ga.; E. H. Hamby, Falco, (Continued on page 64)

Mr. Simmons Makes Good

That ride about the city of Jacksonville, the visit to Mr. Simmons' productive pecan orchard and the trip to Pablo Beach constituted a fine ending of a profitable and pleasureable gathering. It will be remembered that at Thomasville, Ga., last fall Mr. Simmons promised some sensational developments at Jacksonville's famous bathing beaches—sights which alone would be worth the convention trip. Great faith was placed in these promises and most of the members left their wives at home. Mr. Simmons was kept busy throughout the convention answering questions as to details of this last day feature—the drive to the beaches. Indeed, interest was so intense that when an indication of the number who desired to take the beach ride was asked for, practically the entire audience arose. Exceptions were Messrs. Small, Wight and Parker whose wives were with them, though it was noted that President Patterson and Robert E. Woodson did not hesitate to join the party, accompanied by their wives. The clamor for the beach trip was so strong, in view of Mr. Simmons 1922 portrayals and assurances that the local committee was put to it to provide enough conveyances. The committee issued through the local press an appeal for additional automobiles, stating that while 30 had been promised 50 were needed. The response was generous. Among the conveyances tendered was the big new green sight-seeing car which was quickly filled. This big car is speedy and rides as comfortable as a limousine.

The marked development of the business and residence sections of Jacksonville since Mr. Simmons became a resident there 35 years ago was viewed with interest. The Association members were greatly surprised by the quantity of pecans in Mr. Simmons' grove notwithstanding the sand in which the trees are growing. It was evident that this grove has had great care. The trees are mostly President (Moore?) and Schley. They are in fine condition.

The ride to the beaches and along the hard sand at the water's edge was greatly enjoyed. Up to this time Mr. Simmons had made good on all he had undertaken as chairman of the arrangements committee. It was late in the afternoon of a week day at the close of the beach season and the weather was not all it should have been for the occasion. It looked dubious for fulfillment of great expectations as to those "brilliant bathing beauties," that kaleidoscopic flashing of colors and forms which Mr. Simmons assured the nut growers characterizes scenes on Neptune and Pablo beaches daily. The visitors looked up and down the beach in vain. Mr. Hess' binocular field glass was in great demand.

Those who had brought extra films for their kodaks had about decided that there was nothing doing, when as some of the convention party turned to re-enter the conveyances, expressing appreciation of Mr. Simmons' good intentions and sympathizing with his discomfiture, a big touring car dashed up and parked hurriedly on the beach. Descending therefrom was as gorgeously arrayed a bather as could be imagined. She was dressed for the surf into which she plunged after cavorting on the sand just like Mr. Simmons had said she would do! It seemed but a fortuitous happening. But he will never convince some of the nut growers at least that her appearance was not arranged by him at the eleventh hour in order to "save his face." Anyway the arrangement committee chairman made good.

American Nut Journal

COVERING NUT CULTURE

NORTH—SOUTH—EAST—WEST

AMERICAN FRUITS PUBLISHING CO., INC.
59 State Street - Rochester, N. Y.

RALPH T. OLCOTT, Editor and Manager

Official Journal Northern Nut Growers' Assn
Official Journal Nat'l Pecan Growers' Assn

SUBSCRIPTION RATES

Three Years, in advance.....\$5.00
One Year, in advance.....\$2.00
Canada and Abroad..... 2.50
Single Copy..... .20

ADVERTISING RATE

Per column inch.....\$2.80
Forms Close 10th of each month

ROCHESTER, N. Y. OCT., 1923

NUT ASSOCIATIONS

California Almond Growers' Exchange—President, G. W. Pierce; manager, T. C. Tucker, 311 California St., San Francisco.

California Walnut Growers' Association—President, C. C. Teague; secretary, W. T. Webber; manager, C. Thorpe, 1745 East Seventh St., Los Angeles, Cal.

Alabama Pecan Growers' Association—President, C. Kirkpatrick, Selma, Ala.; secy-treas., Morgan Richards, Selma, Ala.

Georgia-Florida Pecan Growers' Association—President, A. C. Snedeker, Blackshear, Ga.; vice-pres., H. K. Miller; sec'y-treas., J. S. Wight, Cairo, Ga.

National Pecan Growers' Association—J. M. Patterson, Putney, Ga.; vice-pres., E. C. Butterfield, Winona, Tex., and Clifton Kirkpatrick, Selma, Ala.; secy., J. Lloyd Abbot, Spring Hill, Ala.; treas., J. Slater Wight, Cairo, Ga. 1924 meeting, Cuthbert, Ga., Oct. 1-3.

National Pecan Growers' Exchange—President and manager, William P. Ruillard, Albany, Ga.; vice-pres., J. B. Wight; Secy-treas., A. D. Galt.

Northern Nut Growers' Association—President, Harry R. Weber, Cincinnati, O.; Vice-pres., J. F. Jones, Lancaster, Pa.; treas., H. J. Hilliard, Sound Beach, Conn.; secy., Dr. W. C. Deming, 983 Main St., Hartford, Conn. 1924 convention, New York City, Sept. 3-5.

Oklahoma Pecan Growers' Association—President, O. K. Darden, Ardmore; secy-treas., C. E. Ringer.

Oregon Walnut Association Co-operative President, F. W. Meyer, Dundee, Ore.; Manager, W. H. Bentley, Dundee, Ore.

Southern Pecan Growers' Association—President, R. B. Small, Macon, Ga.; treas., P. J. Brown, Albany, Ga.; secy-manager, Harry U. Jackson, Baconton, Ga.

Southeast Georgia Pecan Association—President, Dr. W. H. Born; vice-pres., Col. G. H. Harris; secy., J. H. Girardeau, McRae, Ga.; treas., E. F. McRae.

Texas Pecan Growers' Association—President, H. G. Lucas, Brownwood; vice-pres., John P. Lee, San Angelo; Secretary, Oscar Gray, Waxahachie.

Western Nut Growers' Association—President, Ferd Groner, Hillsboro, Ore.; secy-treas., C. E. Schuster, Corvallis, Ore.

Gratefully Acknowledged

"I just received in this mail my first issue of the American Nut Journal and I was so impressed with same, that I know I have been missing a great deal; however I hope to correct my error as far as possible. Herewith I am handing you my check for \$8.00 for which please credit me with subscription for this year 1923 and please send me the copies of the American Nut Journal for the past three years up to this year's issues, 1922, 1921, 1920."—R. R. RICE, VARNER, ARK.

"I've slipped up on renewing my subscription to the American Nut Journal. Please send it and bill. Can't do without it and didn't realize how essential it is if one is going to keep posted."—S. B. GARBUTT, PRINCETON, CAL.

THE WASHINGTON CONVENTION

The Northern Nut Growers Association was handicapped this year in convention details by reason of the much-regretted absence of Secretary Deming, Vice-President Jones and several of the prominent persons scheduled for the program. Fortunately C. A. Reed, pomologist, Bureau of Plant Industry, former President T. P. Littlepage, of Washington, and former Secretary Willard G. Bixby were on hand to make eleventh-hour arrangements based upon the excellent preliminary program prepared by Secretary Deming. Bureau heads from the Department of Agriculture readily consented to fill in on the program which proved amply sufficient to occupy the close attention of those present for two days and a half.

There was a general discussion of progress made in Northern nut culture. T. P. Littlepage delivered an instructive address on the status of commercial nut culture in the Northern states which was declared to be of great value to the prospective planter. Dr. Robert T. Morris with the aid of accounts of experiences by members in the use of paraffin wax in grafting made further progress in devising means for grafting successfully in warm climates. Willard S. Linton delivered one of the most important addresses of the convention, on roadside planting versus reforestation. This will appear in full in the proceedings and in the Journal.

The Association was incorporated under the laws of the District of Columbia. The dues were fixed at \$5.00 to include subscription to the Official Journal—the American Nut Journal. Harry R. Weber, Cincinnati, Ohio, was elected president. The Association will meet in New York City, September 3-5, 1924.

A CONVENTION TREE EACH YEAR

We suggested to some of the members of the National Pecan Growers Association that an appropriate feature of the conventions would be the planting, with formal ceremony, of a pecan tree in each city where the Association meets—an annual pecan tree planting event under Association auspices. The idea was well received.

The tree could be planted at a previously announced hour and a program of addresses could be arranged to include both Association and local speakers, the mayor, park commissioners, civic and social club officials, a woman's organization, etc. The attendance of residents ought to be large if due publicity were given in advance in the local press. Such an event would do much to arouse interest in pecan planting.

The custom of planting a convention nut tree was established recently by the Northern Nut Growers Association. The ceremony at the Rochester, N. Y., convention last fall was impressive. A Persian walnut tree was planted in Highland Park. The Association did not observe the custom this year at the Washington meeting, probably due to oversight.

A tip to the enterprising promoters of the Cuthbert convention undoubtedly is all that is necessary.

Lightning Rod on Pecan Trees

An indication of the historic and sentimental value of the big pecan trees on the George Washington estate at Mount Vernon, Va., is the announcement that lightning rods are being placed on these trees.

Willard G. Bixby, Baldwin, N. Y., finds by experience that the following filberts are worthy of planting: Rush, White Lambert, Merveille de Bolweiller, Grosse Kingelnuess.

THE JACKSONVILLE CONVENTION

The usually lively, interesting and highly instructive proceedings of the National Pecan Growers Association characterized the twenty-second annual convention, in Jacksonville, Fla., Oct. 2-4. The heavy program was disposed of on schedule time under the able direction of President Simpson who has repeatedly proved that a great amount of convention matter can be handled within the usual limits with systematic control. Papers and discussions covered many phases of pecan culture on commercial lines. Emphasis was laid upon the distribution of the product, since problems connected with this phase are uppermost at present. The industry has advanced beyond the purely cultural period. The necessity for co-operative marketing was deemed worthy of special attention in convention and an entire session was devoted to this subject, with some further consideration at another session. It was a happy thought to invite the officers and members of the citrus exchanges of Florida to recount their experiences, for the information gained is of the highest value. Problems which would otherwise have confronted the pecan growers have been solved for the most part by the experience of the citrus growers. The leaders among pecan growers are convinced of the value of co-operation in marketing pecans. It is the expectation that a strong central selling organization will result from present discussions. Evidently details will have to be worked out from more than one angle; the experience will be of great value when all forces are combined. The pecan is a wonderful nut; it is in great demand; its production should be maintained on a high standard, and its distribution should be upon lines which shall make it available over a wide area at prices that will return a just revenue to those who have toiled for years to produce it in its highest condition and who must continue to toil to maintain that condition.

The convention proceedings are summarized in this issue. Further reference to them will be made in succeeding issues. Those who attended the convention were, as usual, amply repaid. Those who were not able to attend may well seek to obtain all they can of the wealth of information that was developed; they should plan to attend next year's convention and recoup on much that they have missed in side-lights and good fellowship. The new president, J. M. Patterson, has outlined a program which should carry the Association far in advance during his administration and we bespeak hearty co-operation on the part of all present members and many who are yet to join. Alabama's rapid extension of the industry was recognized in the election to the second vice-presidency of President Clifton Kirkpatrick of the Alabama Pecan Growers Association. The Texas growers are represented by the first vice-president, E. C. Butterfield. The secretary and treasurer were re-elected and the members of the executive committee are the same as before with the exception of Mr. Bacon whose place is taken by Mr. Snedeker. The Association will meet in Cuthbert, Ga., October 1-3, 1924.

Mr. Stuckey of the Georgia Experiment station and Dean Kyle of the Texas College of Agriculture are authors of a book on the pecan which will be published soon by the Macmillan Pub'g Co.

Just mention AMERICAN NUT JOURNAL

Practical Methods of Developing a Commercial Pecan Orchard

By J. B. Wight, Cairo, Ga.

IN PRACTICAL foresightedness the pecan grower is superior to the ordinary horticulturist in that he is willing to forego near-by profits for those which are more stable and more lasting, though they may not come so soon. Grapes and peaches run their course in from ten to fifteen years. Apples and oranges are becoming decrepit at from forty to sixty years; while pecans are in the prime of life when they are one hundred to two hundred years old.

Furthermore, the growth of most horticultural products has to race with the weather, delayed train schedules and vacillating markets. Not so with the pecan grower. If he is not ready to gather his nuts in October they are just as good in November. And if the November market is not to his liking, he can save them without deterioration for the usual bare market of the next season. Nature has given this queen of nuts a shell which protects it from air, dust and dirt, making it one of the cleanest as well as one of the most quickly available foods in all the realm of horticulture. By using cold storage, there is the further advantage of being able to carry over any surplus from a full crop this year with a probable sagging market to the following one which is usually a short crop year.

A word here as to the returns which may be expected from a pecan orchard when it becomes established, in other words, when it is from fifteen years old and upward. Years of experience have convinced me that the net average yearly income per acre may be reasonably placed at one hundred dollars. This estimate is based on an average annual yield of 600 pounds of nuts which should sell at an average price of 25c per pound. This will allow \$50.00 per year for cultivation, seed for cover crops, spraying, harvesting nuts, etc., leaving \$100.00 as the net profit. This estimate has been often surpassed, though in most cases it has not been equaled, for the reason that we have not yet gotten away from the old idea that there is nothing to do but set pecan trees, go to sleep for eight or ten years, and then wake up and find a profitable orchard. Let me emphasize the statement that such a proposition has never yet been discovered in horticulture, agriculture, or in any business or professional line, and it never will be. Six thousand years ago the law was laid down that "by the sweat of thy face shalt thou earn thy bread," and this law has not been repealed. It is an inexcusable economic waste to set trees, and then have them fail for lack of proper care.

What, then, are the points necessary to success with pecans? Briefly, they are as follows:

SUITABLE LAND—Fifty per cent and more of the lands in the cotton belt will grow pecans successfully. This land should be such that it can be built up and maintained in a high state of fertility. It should contain a good per cent of humus, which should be kept up regularly turning under leguminous and other crops. A crop as valuable as this deserves the very best land obtainable. Where other necessary points are observed, such land will insure paying crops of nuts; whereas unsuitable land fore-shadows a greater or less degree of failure. It is better to pay \$100.00 per acre for the best land than to have the poor as a gift. The following kinds of land should be avoided:

- (a) Deep, poor sandy land.
- (b) Washed-off hillsides.

(c) Lands underlaid with clay which is practically impenetrable to moisture.

(d) Low wet lands which do not dry off sufficiently to grow cotton or corn successfully. Lands which occasionally overflow, but which dry off sufficiently to become easily tillable, are well suited to pecans. These fertile creek and river bottoms have been nature's favorite planting ground for pecan trees.

GOOD TREES—To set a dwarfish, runted tree practically nullifies all hope of producing a profitable orchard. Only vigorous, healthy trees should be set. An inferior tree even as a gift will prove a costly investment. Under best conditions and measured by a reasonable return on the amount, each tree should, when fifteen years old and upward, be worth from \$50.00 to



J. B. WIGHT, Cairo, Ga.

\$500.00. But don't expect to realize even the lowest of these figures if poor trees are set. We don't buy shoddy when we want results in other lines; why do so in this?

VARIETIES—A commercial orchard preferably contains from two to four varieties. It is very important that these should be wisely chosen. As the pecan ultimately reaches such size as is difficult to spray completely, only those varieties should be selected that are freest from insect and fungous troubles. Scab is probably the worst of the fungous diseases. Some varieties seem especially subject to this disease, while others are practically immune.

Pecans also have their adaptabilities to latitude, soil, climate, etc., and for this reason those suited to one section may not be the best for another. The following are among the varieties that are making good records, some in wider, others in more restricted sections: Stuart, Schley, Money-maker, Frottscher, Success, Pabst, Moore.

CULTIVATION—It is best to grow some crop among trees until they come to the profitable bearing age. Small grain should be avoided, unless it is to be turned under before growth starts in the trees in the early spring. With this exception almost any other crop may be grown. Proper rotation of crops including frequent use of legumes should be followed so as to keep the soil well filled with vegetable matter. Whatever crops are grown should be highly fertilized, and the trees will get their share of the plant food. Keep the land constantly on the up-grade as far as fertility is concerned.

After trees have come to the age where

they are yielding profitable returns, which usually is in from eight to ten years after they are set, it is likely best to cultivate only for the good of the trees. At this time, a winter cover crop followed by a summer cover crop, both to be turned under, is good. The former may be small grain or a winter legume; the latter may be beggar weed, peas, or velvet beans. Most experienced orchardists prefer the last named. From 400 to 800 pounds per acre of a high grade fertilizer should be applied broad-cast to one or the other of these crops, preferably the spring. Under this treatment good growth of trees should be had, and profitable yields of nuts as well. The pecan is not a regular annual bearer, a full crop being generally followed by one which is more or less short. But where the fertility of the soil is well maintained not only larger but more regular crops will be harvested.

Trees do not thrive on lands which are used as permanent pastures. Under this treatment not only does the ground become compact and so loses some of its moisture-holding capacity, but grazing removes food elements which are not fully restored in the droppings from the animals. You must feed your trees if you expect them to feed you.

If the above suggestions together with others which occur to every sensible grower are followed then profitable orchards will result. The pecan offers no royal road to wealth. But when all the factors of production, marketing, supply, demand, etc., are considered I know of no more promising horticultural field than that offered by this best of all the nut family.

One caution in conclusion: Don't set more trees than will be cared for in the best manner, no matter whether this be a few trees around the home, or a commercial orchard of hundreds of acres. Do this and your trees will from year to year be an increasing source of pleasure and profit, though you live to be a hundred years old.

Northern Nut Growers

(Continued from page 65)

tails, and the fact that they were kept busy is a tribute to what Secretary Deming usually has to do almost single-handed.

The illustrated address by C. A. Reed on the first evening of the convention descriptive of the walnut industry of China and the Chinese people, was highly interesting.

The courtesy through which the Association was enabled to use the auditorium of the New National Museum was greatly appreciated. The accommodations were excellent.

W. S. Linton, Saginaw, Mich., whose distribution of walnuts from the George Washington estate at Mount Vernon to the school children of Michigan last year was described in these columns, has obtained the consent of Superintendent Dodge, of the Mount Vernon estate, to use this year's crop for a similar purpose.

Henry Ford, the noted manufacturer of gasoline-driven cars, has become interested in nut culture to the extent of asking for some of the historic walnuts from Mount Vernon, for the purpose of planting them and Mr. Linton will see that he gets them.

Russell Adkinson has purchased the Collins Nurseries, Santa Ana, Cal.

Prof. C. I. Lewis says that the apple in the Garden of Eden was a Ben Davis. If it had been any other variety, Eve would have eaten all of it.

Just mention AMERICAN NUT JOURNAL. Journal, three years for \$5.00; twelve months, \$2.00; single copy, 20c.

Notes from an Experimental Nut Orchard

Willard G. Bixby Before the Northern Nut Growers Association

FOR several years the Association has been advocating the planting of experimental nut orchards, and ever since I heard of this suggestion, I have been desirous of having one and being able to contribute information to our knowledge of nut growing. Therefore, since 1917, I have been assembling at Baldwin, material which I hoped would aid in this. At the Rochester meeting some of the results were noted and this year I trust something presented will prove of interest.

CHESTNUTS—Last year, I expressed the belief that by carefully watching chestnut trees and cutting out the blight as soon as it appeared, that it should be possible to grow and fruit almost any variety in the blight area. This I have done with every variety that I have tried, but that is about all, apparently, that is possible to do for nearly all of my trees have been badly attacked by the blight at the crown, that is, at the junction of the root and trunk, and to cut out the blight means to cut down the tree. The most resistant variety noticed so far is the Boone, which has some Japanese chestnut parentage, but probably the Boone trees will not last over a year longer.

Apparently it is going to be necessary to get some resistant stock and do the grafting high enough up to prevent fatal attack of the blight at the crown. Mr. P. W. Wang, sent some Chinese chestnuts in the fall of 1921 and I have now several hundred seedlings of what I suppose are *Castanea mollissima*, of which I plan to grow a number to rather large size, set them out where the next planting of chestnut trees is to stand and graft the branches to fine varieties. It will take at least two or three years, however, before this can be done.

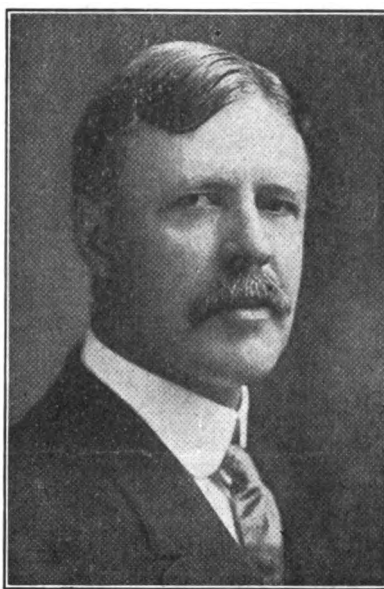
HAZELS—For some four years, I have been assembling for hybridizing purposes, selected American hazels from various sections of the United States as well as the various European cultivated varieties that gave promise of being hardy. This year both blossomed rather freely but the only variety of which I had enough pollen to work with was the Italian Red. The staminate flowers were picked from some six or eight American hazels which were blooming well and the pistillate flowers were pollinated with Italian Red pollen, in the hopes that some hybrid nuts would result. Although the pollination was repeated on two occasions beside the first, I was much disappointed to find only an occasional nut as a result.

It is to be said in this connection, however, that there were practically no nuts on these American hazels, which had not been pollinated with strange pollen so the lack of nuts could not be laid to the artificial treatment given the flowers of these plants where it had been planned to make hybrids. Apparently it was due to climatic conditions that nuts were almost lacking on all hazels here this year, but I do not recall any severe cold spells when the hazels were in flower. Still, on one or two branches which I had tagged, as being particularly full of pistillate flowers were noticed an almost equal number of dead pistillate flowers a little later. It is seemingly going to be well to carefully study the development of the hazel flowers into nuts. They grow differently from the walnuts and the hickories. The hazel flowers apparently, after being fertilized, develop into stems on which

the existence of nuts escapes the attention, at least of the casual observer, until about August, while the nuts on the walnuts and the hickories even though small at first, are plainly visible from the time they are formed by fertilized flowers until they are matured.

HICKORIES—The bearing age of the transplanted hickory so far has been almost an unknown quantity and what we did know has been such that the Association has hesitated to say much about planting hickories, its recommendations on the hickory being confined to that of top-working existing hickories. These are known to begin bearing soon after top-working, records of bearing in two or three years not being unusual.

On transplanted hickories, however, about all the information of which I know is as follows:



WILLARD G. BIXBY, Baldwin, N. Y.

lows: The late Mr. J. W. Kerr of Denton, Md., many years ago, bought a number of shagbark hickories from a Nursery, set them out and noted that the time that elapsed before they bore was about 25 years. Mr. Rush's Weiker tree which bore in 11 years after being set out cut down this time materially.

A Kentucky hickory on my place set out

in the fall of 1917⁷ flowered this year, but I had no pollen with which to fertilize the blossoms and the nutlets dropped off. A young shagbark seedling set in its present location in the fall of 1919 and grafted to Barnes this spring, also set a nut but this dropped off like those on the Kentucky and apparently for the same reason. It would certainly seem as if under favorable conditions the transplanted hickory is not going to be any where near as slow as feared in coming into bearing.

WALNUTS—A Royal and a Paradox walnut each supposed to be grafted trees with scions from Burbank's original trees, bloomed this year and the Royal has a number of nuts on it. The Paradox has been here a very much shorter time, not over two or three years so perhaps it is too soon to be expecting nuts. The Paradox is said to be a very shy bearer, setting nuts only occasionally and then but few; still one of my Paradox trees which is not over three feet high blossomed full. It would seem

it might pay to study this tree and see if the sterility or fancied sterility of this tree could not be overcome by seeing that proper pollen is at hand at the right time. A Cording walnut, a hybrid between the English walnut and the Japan walnut not quite three feet high is bearing a nut this year.

GRAFTING—Perhaps the most interesting thing to be related is the result of attempts to determine the species of hickories best suited as stock for the fine varieties of hickory that we have. In preparation for this and through the kindness of Mr. Henry Hicks of Westbury, L. I., over 100 each of hickory trees of several species were obtained and set out in the fall of 1919. They were in fine condition for grafting this spring. There are some fifteen species of hickories in the United States. The fine varieties of hickories that we have which are generally supposed to be largely shagbarks may prove to be much better adapted for grafting on some stocks than on others. A knowledge of this will prove to be of great value in top-working. The grafting was done by Dr. Deming, on May 29, 30, 31 and June 1 of this year, 31 grafts being set on shagbark stock, 52 on mockernut, 53 on pignut, 47 on pecan and 91 on bitternut, a total of 274. There were also 353 walnut grafts set on walnuts of four species. The results of this work is summarized in the tables on the next page:

Nursery Grown Trees for Roadsides

P. O. Anderson, sylviculturist, Minnesota State Forest Service, St. Paul., writes to H. R. Mosnat, Morgan Park, Chicago, Ill., under date of July 13th, as follows:

The State Forest Service not only is making plans but has planted out 22,000 black walnut trees in 1922 and approximately so that we feel we have made quite extensive roadside plantings so far. It is our intention to carry out this work, planting about 40,000 trees a year from now on until the main trunk highways have been entirely planted to roadside trees.

All the stock we use is Nursery-grown stock. In 1922 we furnished Dr. Mayo of Rochester with approximately 250 black walnut for planting on his farm and from reports he has made he also informs us that they are doing mighty well. Bitternut and black walnut are not adaptable to the region very far north in this state, and we must confine our activities with these species par-

ticularly to the southern portion, using elm, ash, hard maple, etc. in northern Minnesota. It is our intention to use later on some conifers when they get a little larger.

I wish to thank you for your interest and information particularly about the hickory nuts, as we may want to get some of these at some later time for experimental purposes for plantings such as these. I am enclosing for your information our planting leaflet which will give you an idea of what we are attempting to do.

Mr. Mosnat says: "In Indiana, Charles Dean, state forester, has asked permission to plant the 70,000 miles of highways in that state to black walnuts and hickory trees. At 2000 trees per mile for both sides of the highway at about 53 feet apart—plenty close for trees that grow so large—that would take only 140,000,000 trees! I have written to Mr. Dean insisting that these should be named varieties of black walnut and hickory trees."

Interesting Experiments In Grafting Hickories

HICKORIES, CIONS FROM YOUNG TREES

Stocks, Number of Grafts and Per Cent of Catches

Variety	Bitternut No.	Mockernut* No.	Pecan No.	Pignut No.	Shagbark No.	Total No.
Barnes, cions from Dr. Deming's trees...	3 100.0	3 100.0	3 100.0	3 100.0	6 100.0	18 100.0
Gobble, cions from Dr. Deming's trees...	1 100.0	1 100.0	1 100.0	1 100.0	1 0.0	5 80.0
Griffin, cions from Dr. Deming's trees...	1 100.0	1 0.0	1 0.0	1 100.0	1 100.0	5 60.0
Hales, cions from W. G. Bixby's trees...	5 100.0	5 60.0	5 80.0	4 25.0		19 68.4
Kirtland, cions from Dr. Deming's trees...	3 66.7	3 33.3	3 66.7	3 66.7		12 58.3
Laney, cions from Dr. Deming's trees...	6 66.7					6 66.7
Long Beach, cions from Parent Tree.....	3 33.3	3 66.7	4 50.0	4 25.0	3 100.0	17 53.0
Siers, cions from Dr. Deming's trees...	5 100.0					5 100.0
Stanley, cions from Dr. Deming's trees...	3 66.7	3 66.7		3 66.7		9 66.7
Taylor, cions from Dr. Deming's trees...	4 75.0	5 60.0	5 80.0	3 100.0		17 86.5
Total	34 80.8	24 60.8	22 68.1	22 72.9	11 75.0	113 74.0

*The mockernuts were larger than any other hickories grafted excepting some bitternuts. They were grafted mostly on branches.

HICKORIES, CIONS FROM OLD TREES

Stocks, Number of Grafts and Per Cent of Catches

Variety	Bitternut No.	Mockernut* No.	Pecan No.	Pignut No.	Shagbark No.	Total No.
Brooks, cions from parent tree, poor condition	5 40.0	5 0.0	5 20.0	5 40.0		20 20.0
Clark, cions from parent tree, poor condition	5 40.0	5 0.0	5 20.0	5 40.0	5 20.0	25 20.0
**Fairbanks, cions from parent tree (?), dry but otherwise good	27 57.8					27 57.8
Kentucky, from parent tree, poor condition	5 20.0	3 33.3	5 80.0	5 80.0	5 80.0	23 60.8
Manahan, cions from parent tree, poor condition	5 20.0	5 0.0	5 20.0	6 33.3	5 20.0	26 24.6
Vest, cions from parent tree, poor condition	5 20.0	5 0.0	5 40.0	5 60.0	5 20.0	25 20.8
Weiker, cions from parent tree...	5 20.0	5 0.0		5 60.0		15 26.8
Total	57 45.0	28 5.5	25 36.0	31 45.6	20 35.0	161 32.9

*The mockernuts were larger than any other hickories grafted excepting some bitternuts referred to in the next footnote. They were grafted mostly on branches.

**Of these cions 5 were set in branches on two trees 1 1/4 or so in diameter and showed 100% catches; balance were set in the top on small trees 1/2 diameter or less, and showed 54.5% catches.

BLACK WALNUTS, JAPAN WALNUTS, PERSIAN WALNUTS, BUTTERNUTS

Stocks, Number of Grafts and Per Cent of Catches

Variety	Black Walnut No.	Butternut No.	Japan Walnut No.	Persian Walnut No.
Adams Black Walnut, cions parent tree.....	13 15.4			
Alley Black Walnut, cions parent tree.....	9 0.0			
O'Connor Hybrid Walnut, Persian Walnut and Black Walnut (?), cions parent tree...	9 22.2			
	31 12.9			
Ohio Black Walnut, cions W. G. Bixby's trees...	17 64.7			
McCoy Black Walnut, cions W. G. Bixby's trees	9 77.0			
Stabler Black Walnut, cions some W. G. Bixby's trees, and some Dr. Deming's trees...	85 51.2			
*Ten Eyck Black Walnut, cions W. G. Bixby's trees	82 97.0			
Thomas Black Walnut, cions W. G. Bixby's trees	23 100.0			
Wasson Black Walnut, cions W. G. Bixby's trees	8 75.0			
	174 69.5			
Persian Walnuts 4 varieties, cions about 2/3 from parent trees, all of which were quite vigorous growers				46 0.0
Aiken Butternut, cions W. G. Bixby's trees...		39 38.5		
Lancaster Heartnut, cions W. G. Bixby's trees			53 3.8	

*One cion was overlooked in tying and waxing, otherwise apparently we would have had 100% catches.

In the above two groups of hickories the one where scions were cut from young rapidly growing trees, contrasts unmistakably with those where scions were cut from old bearing trees. The same is shown in the table of black walnut grafts where the Alley, Adams, and O'Connor scions were cut from old bearing trees and the others from young rapidly growing trees.

The poor success with the heartnuts is quite in line with previous attempts at propagating this species by grafting. Results shown here with the butternut are deemed reasonably satisfactory in view of the well known difficulty of grafting this species. It should be noted here, that in the case of every graft that took and grew it was the

small buds that were successful, not the large ones. The total lack of success with the Persian walnut is inexplicable to the writer, but he knows of no previous attempts to graft Persian walnut on Persian walnut root.

Black walnuts show a very high percentage of catches in the case of the Thomas and Ten Eyck varieties 100% but in the case of the Stabler this is reduced to 91.2%. I would say in this connection that neither of my two Stabler trees are vigorous growers and so the trees grafted with scions from these are really cases where we have been using scions from vigorous growing trees and we know that this does not give a high percentage of catches.

The proper species to be used as a stock for the various varieties of hickories has not been shown conclusively for the number of grafts of each kind set was too few to be conclusive and these experiments should be repeated. In the case of most of these varieties where results are poor it was particularly noted when the grafts were set that the scions were in poor condition a number of scions being thrown away because the cambium layer was dead. It is to be hoped that a species will be found to which will be well adapted to the Vest hickory which the writer regards, everything considered, as the best hickory that we have. Seemingly the pecan is the stock that gets the greatest number of catches, but the difficulty the writer has had in making Vest hickories on pecan root live, leads him to question as to whether another stock might not prove better. Another thing disappointing so far is in the seeming poorness of the mockernut as a stock. Over quite a large section of the United States, the mockernut is the prevailing hickory and in that section the mockernut will be most generally available for top working; moreover it will grow well in sandy soils where the shagbark is not found. In Petersburg, Va., the writer has seen it seemingly outgrow the black walnut.

The adaptability of the Barnes hickory on all stocks is notable for it is the only one of the 10 fine hickories tested in the 1919 contest of which this is true. If these grafts continue to flourish and especially if future experiments check the results this year, the Barnes will have a peculiar value for top working. It is one of our best hickories and apparently is our surest variety for top working.

TIMELY AND IMPORTANT WORK

The Albany, Ga., Chamber of Commerce is taking up important work by issuing a questionnaire on the pecan industry in the Albany district in order to secure from reliable sources information to be given in a folder that is being prepared by the organization, setting forth some of the advantages possessed by Albany that will appeal to people seeking a home, an industrial site or an investment. Such questions as the best soil adapted to pecans, best variety of trees for this territory, best cultivation methods, what age will a grove become supporting, what can be done to increase production, and others, will make up the questionnaire which will be sent to all growers in and around Albany.

W. P. Jernigan, secy. Summit Nurseries, Monticello, Fla., large growers of pecans, also some English walnuts and Japanese varieties, which they graft on native black walnuts, (*Juglans nigra*), writes: "It is only here and there that an English walnut will do fairly well in the lower South. It is not a success commercially. The tree will grow nicely, but it does not fruit well under our climate conditions. The black walnut crop is heavy again this year."

Nearly every year the mountaineers of the Carolinas during winter, crack out usually a couple carloads of black walnut meats, which go to the Philadelphia markets, and are snapped up quickly. That amount does not even supply that one market.

The "Gloria Grand" Pecan

W. W. Watson, Orangeburg, S. C., will soon introduce a variety of pecan which he has named "Gloria Grand." He says: "It has striking similarity to the Stuart pecan, but the new nut is 50% heavier. The present tree is apparently free from disease and is annually a prolific bearer. I am propagating this variety for the first season and intend to plant it in a large commercial grove. I have been studying pecan culture at first hand for twenty years, and of the dozen or more varieties I have grown, this new nut is the most attractive."

Co-operating Marketing

CO-OPERATIVE marketing was made a special feature of the annual convention of the National Pecan Growers' Association in Jacksonville. Increasing production of pecans makes the consideration of the most efficient methods of marketing a matter of immediate importance to orchard owners, especially in the southern states where the nut industry has reached its highest development, notably Alabama, Florida, Georgia and Mississippi.

It is a well known fact that among the seasoned co-operatives in the United States, other than on the Pacific coast, the most outstanding example of maintained and expanding success has been the Florida Citrus Exchange. The general conditions under which this organization has been built up are not at all dissimilar to those which are found in the pecan producing territory—very much more comparable therewith than the ones which prevail in California. The growers of citrus fruits and of pecans in the south and southeast, think alike on many matters and the type of co-operation that has served the former should be well adopted to the latter.

Consequently it was decided to take advantage of the fact that the 1923 convention of the pecan association was held in Jacksonville to better acquaint the members with the principles and practices of the Florida Citrus Exchange. The latter organization was requested to arrange for participation in the program of a number of its members and officers. The following schedule was prepared:

I. Co-operative marketing and growers—what it has accomplished for one of them and the obligations that he feels its service imposes upon him—S. C. Warner, East Palatka, Fla., twenty minutes.

II. Co-operative marketing and local associations of growers—how best to maintain their interest and loyalty and ways and means for assuring efficiency in packing house operations—H. V. Pay, manager, DeLand Citrus Growers Exchange, DeLand, Florida, twenty minutes.

III. Co-operative marketing and groups of associations—how sub-exchanges function to co-ordinate the interests of the local associations who compose them and the methods which have proved most effective to this connection—H. G. Gumprecht, Bradentown, Fla., manager Manatee Citrus Sub-Exchange, twenty minutes.

IV. Co-operative marketing and the trade—How goodwill and active support have been built up for the citrus fruits sold by the co-operating growers of Florida—George A. Scott, Tampa, Fla., general sales manager Florida Citrus Exchange, ten minutes.

V. Co-operative marketing and advertising—how modern advertising has been utilized and some of the outstanding features of the experience gained.—Jefferson Thomas, Jacksonville, Fla., advertising counsellor Florida Citrus Exchange, ten minutes.

VI. Co-operative marketing and organization—how the concerns of a widely separated group of growers have been co-ordinated and the essential steps necessary thereto.—C. E. Stewart, Jr., Tampa, Fla., business manager Florida Citrus Exchange, twenty minutes.

VII. Co-operative marketing and financial stability—how the practice of co-operation has benefited the general prosperity of the communities in which it has been most actively followed.—A prominent South Florida banker, thirty minutes.

VIII. Co-operative marketing and development—how co-operation on the part of agricultural and horticultural interests contributes to the upbuilding of community life and increases population and wealth.—Karl Lehmann, Orlando, Fla., secretary Orange County Chamber of Commerce, thirty minutes.

IX. Co-operative marketing its Alpha and Omega—the fundamentals, the difficulties, the successes, the ultimate aim and the outlook, Dr. J. H. Ross, Winter Haven, Fla., president Florida Citrus Exchange, thirty minutes.

National Association—Continued

(Continued from page 69)

Ala.; E. G. Hess, Manheim, Pa.; C. D. Haynes, Eufaula, Ala.; H. H. Hedrick, Albany, Ga.; A. F. Herndon, Monticello, Fla.; Harry U. Jackson, Baconton, Ga.; B. O. Jones, Citronelle, Ala.; L. Maciejewski, F. A. Mahan, Monticello, Fla.; R. S. Mathews, Warrenton, Ga.; H. D. Moyr, Cuthbert, Ga.; L. A. Niven, Memphis, Tenn.; C. C. S. Nooter, Earleton, Fla.; G. F. Orum, Midway, Ala.; C. C. Overholts, Lake City, Fla.; Ralph T. Olcott, Rochester, N. Y.; Dr. J. C. Patterson, Cuthbert, Ga.; A. S. Perry, Cuthbert, Ga.; A. Pearlman, Valdosta, Ga.; L. V. Pringle, Biloxi, Miss.; C. S. Parker, Thomasville, Ga.; Mr. and Mrs. J. M. Patterson, Putney, Ga.; W. E. Parmenter, Orange Park, Fla.; D. E. Phillips, Smithville, Ga.; R. W. Ruprecht, agricultural experimental station, Gainesville, Fla.; L. N. Reed, Monticello, Fla.; J. O. Roquesmore, Lanett, Ala.; Morgan Richards, Selma, Ala.; D. L. Smith and wife, Cuthbert, Ga.; H. W. Smithwick, Americus, Ga.; H. H. Simmons, Jacksonville, Fla.; A. C. Snedeker, Blackshear, Ga.; Mr. and Mrs. R. B. Small, Macon, Ga.; G. R. Smeltz, Lancaster, Pa.; C. A. Simpson, Monticello, Fla.; J. S. Wight, Cairo, Ga.; B. W. Stone, Thomasville, Ga.; R. L. Scott, Citronelle, Ala.; W. M. Van Cise, Albany, Ga.; J. B. Wight, Cairo, Ga.; Dr. H. W. Waters, Falco, Ala.; L. B. West, Cuthbert, Ga.; C. W. Waughtel, Homeland, Ga.; W. L. Watson, Jacksonville, Fla.; George Walker, Beach Island, S. C.; M. W. Woodburn, Lake City, Fla.; Dr. W. A. Warren, East Tallahassee, Ala.; T. S. McManus, Waldo, Fla.; Herbert C. White, Putney, Ga.; Fred Williams, Albany, Ga.; J. H. Wells, Baldwin, Fla.; Ben Adler, Albany, Ga.; I. N. Zarfos, Folkston, Ga.

Among others who arrived late are: Prof. W. N. Hutt, Southern Pines, N. C.; Prof. Harold H. Hume, Glen Saint Mary, Fla.; C. A. Reed, Pomologist, U. S. D. A., Washington, D. C.; Robert E. Woodson, pecan sheller manufacturer, St. Louis, Mo., and Mrs. Woodson; Mr. Carmichael, Aiken, S. C.; H. A. Gosard, Wooster, O.; A. C. Davenport, Chicago, Ill.

Sidelights at Jacksonville

A placard prominently displayed on the outside of the Seminole hotel near the main entrance proclaimed that the Northern Pecan Growers Association was in session there and extended a welcome to all—an effective bit of publicity by the local committee which also saw that due announcements were made in the local press.

A Clarke Snedeker said at the first session of the convention: "When paying your membership dues, by all means pay the combination price and include subscription to the *American Nut Journal*. It is of the greatest value to every pecan grower."

The twelve Rotary members of the Association were the guests of Jefferson Thomas at a luncheon at the Hotel Seminole.

Coco-cola dispensed from a captured moonshiner's copper still by one or more of Cuthbert's South Georgia beauties, at the next convention, ought to match up pretty well with Mr. Simmons' Pablo beach promises this year.

It has been proposed that as one of the interesting features of the convention at Cuthbert next year, a motor tour of 150 miles through the Albany pecan district be arranged to be enjoyed during or immediately after the convention. Cuthbert is 40 miles from Albany. The tour could easily be made in a day. It would be a valuable feature.

On Tuesday evening an informal reception and dance was provided under the direction of Chairman Simmons of the local committee in co-operation with the Seminole hotel management. It was a pleasant occasion.

While we do not find mention of Cuthbert, Ga., in our Baedeker, we confess to having heard much of it in years gone by, and much more of it than of any other place in Georgia during the convention this month in Jacksonville. The delegation of fourteen Cuthbertians headed by the mayor and piloted by A. S. Perry made a fine start on the 1924

convention before even the 1923 convention had begun. At this rate there is going to be a lively and profitable meeting next year and Cuthbert thereafter will certainly deserve a large dot on the map.

On Wednesday evening a banquet was served in the auditorium, followed by addresses on co-operative marketing and lantern lectures by C. A. Reed, pomologist, U. S. D. A., on "Walnuts in China and the Chinese People," and by Dr. J. J. Skinner, U. S. D. A., on "Soil Fertility Investigation." Both were highly interesting and instructive.

A delegation of fourteen citizens of Cuthbert, Ga., headed by the mayor and chaplain by A. S. Perry, attended the Jacksonville convention to urge selection of Cuthbert as the place for the 1924 convention. The mayor and two or three others of this delegation were held up for speeding, by a deputy sheriff, on the Lake City, Fla., highway—a compliment to the excellence of this new roadbed. They escaped jail through the intercession of Chaplain Perry who counts legal practice and counsel among his many accomplishments. The Cuthbert delegation was warmly welcomed by the Association, but its arguments had been anticipated by the suavity of Mr. Perry who according to the *Jax Times-Union* had the choice of Cuthbert as next place of meeting sewed up and ironed out and placed on the shelf as history long before the Cuthbert delegation arrived or the Association convened. That boy Alex has some speed.

An error in a *Jax Times-Union* article relating to the announcement of the organization of the Southern Pecan Growers Association was corrected in brief mention by President Simpson near the close of the convention, Mr. Simpson's name having been wrongly used in that connection.

The auditing committee reported that it found the accounts of the secretary and treasurer correct. It also recommended that pledges of plural memberships a year ago, to the amount of \$118 be collected at once.

We do not know how the decision to meet next year in Cuthbert affected all the members, but there was no doubt in the case of that indefatigable booster, A. S. Perry. We were aroused from deep slumber at midnight, after the lively convention scenes of Wednesday, by a tenor voice and upon looking from our hotel casement to the walk below we saw Alex with hands in pockets sauntering alone and pouring forth in a high key:

"They say I aint got no stills, but they're on all the hills—on all the hills—of Randolph County."

J. L. Pelham, of the U. S. Dept. Agr., has taken up the important work of questions relative to stocks for pecans at an experiment station at Philema, Lee Co., Georgia.

Secretary Morgan Richards, Selma, Ala., announces that the name of the Central Alabama Pecan Growers Association, of which Clifton Kirkpatrick is president, has been changed to Alabama Pecan Growers Association since the organization quickly became of state-wide scope.

In numerous ways the management of the Seminole hotel, the convention headquarters, contributed decidedly to the comfort and pleasure of the members. In the selection of this headquarters Mr. Simmons scored.

San Saba, Tex., pecan growers to the number of 35 met early last month, upon the call of County Agent F. R. Brison, and decided to pool their pecan crops representing an aggregate of from 200,000 to 400,000 pounds. The Bend Pecan Growers Association was again.

organized some two years ago and very year since the organization the pool has sold its pecans above the market price. Last year the pool received 25 cents a pound flat, and at no time during the year was the market anywhere near that price.

Southern Pecan Growers Association offers 10 lbs. Schley pecans for the best trade name for the nuts marketed by this association.

IN THE ALBANY DISTRICT

A recent drive through the pecan groves in the Albany, Georgia, district was enjoyed by the editor of the Journal. Preparations for the harvest were being made on all sides. President J. M. Patterson of the Paper Shell Pecan Growers Association was found in his office at Putney in conference with the superintendents of his large plantations. He had just returned from the Jacksonville convention where the National Pecan Growers Association had honored him with its highest office. He will be unusually busy during the coming months. He directs the production and marketing of the largest amount of pecans that any concern produces. The bearing pecan groves which he manages cover upward of five thousand acres and the crop therefrom is estimated to be this year 600,000 pounds. His groves, as usual, are in fine condition generally, though the case bearer and scab have this season caused considerable damage. Mr. Patterson believes in putting on the market in the shell only those pecans which are of high grade. The smaller nuts and those of the lower grades will be shelled and the kernels will be sold vacuum packed to provide year around distribution.

All visitors to the Albany pecan district should see the model 14-year-old pecan orchard of Harry U. Jackson, at Baconton. This is rightly regarded as the finest pecan orchard of its size and age in existence. At present the trees are laden with a crop so heavy that the branches are bending low, and in some cases the weight of the nuts has broken heavy limbs. Trees in this orchard are perfect specimens. Their uniformity is especially notable. In size of trunk and spread of limb they would certainly be judged to be ten years older than they are. This grove is a striking illustration of how to grow the pecan successfully. There are many groves in the Albany district which prove conclusively how not to do it. While some grove owners are disappointed by small returns after 14 years of waiting, Mr. Jackson will gather 75 to 100 pounds of fine nuts per tree. A market which cannot be supplied in full awaits the harvest.

The Keystone Pecan Company has large properties—in the aggregate 3000 acres of pecan trees some of which are coming into bearing, though all are comparatively young trees. The orchards of this company which we saw are in excellent condition, and we saw many hundred acres and in one case a thousand-acre orchard of three-year-olds. Apparently much care has been taken of all these trees. They are thrifty without exception. Some replacing has had to be done as is nearly always the case. In a seven-year-old orchard practically every tree is bearing—in some instances a considerable number of nuts, though it was explained that up to this time the care of the trees has had to do with producing trunks and limbs rather than nuts—the construction of the machine for the work it is to do later. The dark, rich-green foliage of all the trees that we saw in the Keystone orchards is particularly noticeable. This spoke highly for the treatment of the trees under the personal supervision of General Manager A. S. Perry. Under the system which President Hess has adopted, the trees on his plantations, if given continuous care, should in the near future be producing commercial crops of high value. Mr. Hess says that scientific care of pecan orchards costs considerable money, that ten-year-old orchards of the kind he is producing cannot be profit-

ably produced and sold for \$200, \$300, \$400 per acre, as has been attempted. His prices are much higher. Others disagree with him on this point. It remains to be seen whether his orchards five and ten years hence will fulfill his predictions in comparison with those which have been sold for considerably less. All present effort in pecan production may still be regarded as in the pioneer stage. Various plans in the paper shell pecan belt are in process of demonstration. There are widely differing views as to varieties, soil treatment, cover crops, fertilization, spraying, etc. Prices, too, have not been standardized. The prospective purchaser of a pecan property ought certainly to visit the territory and study conditions at first hand if he would act intelligently.

IRRIGATION; THEN PECANS

On October 3rd the first round in the contest for irrigation in the San Saba valley, Texas, was won when the commissioners court granted permission to hold an election November 3rd, for voting on the organization of an irrigation district.

"We have strong hopes of winning," says A. W. Woodruff. "There is a good deal of opposition among the element that may be found in every community which is against every effort to further progress. If they beat us at the election, we will start out with another petition and come back at 'em again. We're going to have irrigation here, if we bust a suspender getting it. And then we are going to have more pecan orchards to the square mile than any other county on earth."

This is the progressive spirit of the pioneer; it is what counts. All honor should be accorded to determined men who have the vision and the pluck to lay the foundation upon which in the near future an entire community may prosper.

NORTHERN ASSOCIATION EXCURSION

An interesting trip by motor cars was made by those at the convention on Thursday. The party rode through picturesque Maryland to the country estate of T. P. Littlepage at Bowie and there viewed with special interest the fine pecan trees of Southern Indiana varieties which Mr. Littlepage and his superintendent, Patrick O'Connor, have cared for until now they are commencing to bear high grade nuts of named sorts. Mr. Littlepage has 275 pecan trees and a considerable number of fine black walnut trees. Luncheon was served under the direction of Mrs. Littlepage, the members reveling in watermelon and other things. Later the party proceeded to Bell, Md., and viewed the work of the U. S. Dept. of Agr. in experimenting with Chinese chestnuts and hybrids thereof. The blight has attacked this Chinese chestnut experimental plot, but creosote and tar have been used in an effort to combat it. The result is still in doubt. C. A. Reed, Prof. Lake and others are endeavoring to carry on the work here begun by the late Dr. Van Fleet. They have been obliged to fight the chestnut weevil meanwhile.

Cutting Out Old Trees

In his address to the California walnut growers at the last institute, Ventura, Cal., James D. Culbertson cited the case of the Limoneria Company's Oliveland's walnut orchards. These trees were planted about 1890 at the rate of 31½ trees per acre. They are all Santa Barbara soft shell seedlings. Average for this five year period was 1,171 pounds per acre per year. There were 365.4 acres in this plot excepting in the last year when they were only 165.2 acres.

A test was then made on a ten acre plot and one-third of the trees were removed. This left 21 trees to the acre. Careful



The history of the ceremonial in honor of what is declared to be the oldest pecan tree in Georgia has been recorded in elaborate form in a book of 64 pages bearing the title "Tree Values Are True Values." The ceremonial commemorating the 75th anniversary of this tree said to have been planted in 1848 by Mrs. Rebecca Brooking and now in the possession of George McDonald, Cuthbert, Ga., was directed by the Randolph County, Georgia, Advertising Club, July 12, 1923, as reported in the American Nut Journal at the time. The idea of the ceremonial originated with Elam G. Hess, president of the Keystone Pecan Company. The chairman of the meeting which was attended by many from within and without Georgia, was A. S. Perry, who we suspect had much to do with the production of the handsome publication referred to. It is an interesting example of how much can be made of an occasion of this kind. Certainly the old tree has been highly honored. The ceremonial itself and the book commemorating it will do much to extend public interest in the pecan. The enterprise of the Randolph County Advertising Club is to be commended. The book has been used to direct attention to tree values over a wide territory and there is much it will still do to inculcate high regard for trees. Especially will it cause favorable consideration for the pecan.

records showed an average per acre per year for the six years of 1,360 pounds. The balance of the acreage from which no trees were removed showed an average per acre for the same six years of 1276 pounds.

Besides increasing the tonnage, Mr. Culbertson referred to the wood secured by the removal of every third tree. But while this was of considerable value, it barely paid the cost of removal. However, there is another factor entering into the profit and loss of the case and that is the greater percentage of No. 1 nuts.

California Almond Prices

Reduction in prices of 2½ to 4 cents a pound were announced Sept. 9th by the California Almond Growers' Exchange, which issued the following list of gross opening prices to the wholesale trade on 1923 Blue Diamond Brand Almonds:

Variety	Cents per lb.
Nonpareil	21
I. X. L.	20
Ne Plus	19
Drake	12½

All subject approval price contracts carry special discount one cent per pound.

These new prices compare with the following opening basis in 1922: Nonpareil, 25 cents; I. X. L., 24 cents; Ne Plus, 22 cents, and Drake 15 cents.

The prices on this year's almond crop which is said to be of the richest quality were named at a meeting of the board of directors of the Almond Growers' Co-operative, which will market approximately 80 per cent of the state's almond crop.

Manager T. C. Tucker, of the exchange, stated that prices on the 1923 crop ranged 2½ to 4 cents lower than 1922 prices and 3 to 5 cents lower, according to variety, than the average price for Blue Diamond Almonds for the last seven years.

The exchange will start the movement of the crop eastward as soon as confirmations of buyers' previous orders are received from wholesalers throughout the country. The management of the exchange predicted a firm and active almond market. Manager Tucker said that the exchange has orders for more almonds than it has ever sold in its history.

The American Nut Trade: Market and Crop Reports

PERSIAN WALNUT

Los Angeles, Cal., Oct. 9—Regardless of the fact that opening prices were slightly lower than they were last year, New York failed to buy her customary supply of California walnuts when the new crop went on to the market, a few days ago, it was learned yesterday.

An interesting observation in that connection was the offering, by an independent walnut packer, of shipments from this state to the New York trade at prices in advance of those quoted by the California Walnut Growers Association, and the equally interesting observation that New York smilingly declined the offer.

According to reliable reports from the East, not a single sale was made on this offer, the trade even seeming reluctant to confirm the usual percentage of the Association's crop at the opening prices.

The sales department of the California Walnut Growers Association notes some interesting reactions in connection with the sale of this year's crop.

For instance, the allotment for the New York trade was based upon careful estimates of purchases in former years, coupled with judgment of the increase in population and the measure of prosperity which is being enjoyed by New Yorkers, and yet Gotham's walnut orders fell somewhat below her purchases of former years.

South Dakota took up her full allotment, while North Dakota fell far short of the estimated demand. Nebraska absorbed her full allotment, while Kansas missed the mark by a wide margin. The demand in the Middle West was much stronger than had been expected, while the demand in the East was shorter; indicating, in the opinion of Association officials, that the East is going in for foreign nuts at their present price which is two and one-half cents lower than the price of foreign walnuts last year. The foreign importers are intensifying their sales campaign this year by guaranteeing a 90 percent crack, it is said.

It was stated yesterday by Carlyle Thorpe, general manager of the California Walnut Growers Association, that confirmation of allotments which were made earlier in the season amounts to about 90 percent of the probable tonnage which the Association will have to offer.

The tonnage, Mr. Thorpe asserts, is falling somewhat below the earlier estimates, probably because a large proportion of the crop consists of small sizes, of which it takes a large number to make a pound.

The visible supply of walnuts which the Association will have to sell has been so well booked up that the organization has temporarily withdrawn from the market. Mr. Thorpe announces, until it can carry the harvest along to the point where it will be able to make a closer estimate by various grades and varieties remaining to be sold.

Pearcy Brothers, Salem, Ore., says: "The Jobse Walnut Scrubber is the first walnut washer to be made at a price which permits the smaller grower to own a machine. It is a highly efficient machine. The nuts are passed between two cylinders, one within the other, lined with fibre mats. They are scrubbed under light pressure, passing through 18 feet of mats, and emerge from the scrubbing as a clean attractive product." Nematode and Crown Gall—

Northwest Walnut Grades

The walnut growers of the Northwest have recommended to the State Board of Horticulture a schedule of walnut grades. It is suggested that two grades of grafted nuts be established. That the first grade be designated as "Oregon Fancy Grafted," and that the second grade be designated as "Oregon Choice Grafted." It is further suggested that two grades of seedling nuts be adopted, the first grade being designated as "No. 1 Oregon Soft Shell" and the second grade as "Oregon Choice Soft Shell."

It was advised that Oregon Fancy Grafted Franquette include all grafted Franquette nuts of not smaller than 1 and 1-32 inches through its smallest diameter, and that "Oregon Choice Grafted" consist of all grafted nuts falling below the Fancy Grafted grade but not smaller than 7-8 inches in smallest diameter.

All Fancy Grafted Mayettes or Grafted Nuts of round type should be 1 and 1-16 inches in smallest diameter.

Agreement was reached that "No. 1 Oregon Soft Shells" should include seedling nuts not smaller than 1 and 1-32 inches in smallest diameter, and that "Choice Soft Shells" should not be smaller than 7-8 inch in smallest diameter.

It was decided that all grades should be free from blight and reasonably free from discoloration.

It was deemed advisable that no seedling nuts be marketed under a varietal name.

It was suggested that the minimum cracking test on all standard grades be 90 percent.

It was the suggestion of the Pure Food Commission that no Oregon walnuts be allowed sold on the market having a cracking test lower than 75 percent.

THE PECAN

Three Pabst Trees Immune to Scab

Ocean Springs, Miss., Oct. 1—Where scab has not been combated by spraying on the varieties badly attacked by this disease, conditions are poor. Also where trees are poorly cultivated and not fertilized the average condition is classed at about 70%. Indications are for a brisk demand for nuts at prices somewhat under those of last year.

Some interesting successful spraying experiments have been made by R. P. Barnhart in scab control on the susceptible varieties. There are three Pabst trees in our bearing orchard which apparently are entirely immune to scab. Trees grafted from those last spring are also showing complete immunity.

THEO BECHTEL.

Pecan Investigations

The pecan investigational work of the Florida experiment station, recently provided for by the state legislature, will be conducted by G. H. Blackmon, an experienced pecan culturist from Texas, according to an announcement by station authorities.

Prof. Blackmon graduated from the A. & M. college of Texas in 1910, receiving the bachelor of science degree in agriculture, all his spare time during his junior and senior years being spent on pecan problems.

After graduation he taught horticulture for four years in this Texas institution, particularly handling the pecan work done there, including propagation, cultural and variety tests.

He was employed by the Waxahachie Nursery Company, Waxahachie, Texas, in 1914. Here Prof. Blackmon was in charge of the general propagation and field work of the nursery. His appointment as pecan culturist has been approved by the chairman of the board of control and he commenced work about the first of September.

The authorities at the experiment station have said that the station is much gratified to be able to announce the beginning of this

very important work. Such work as it has been possible to do heretofore was not on any extensive scale and was for but short periods of time. The new specialist will devote his entire time to his work.—Florida Times-Union.

National Pecan Exchange Prices

National Pecan Growers Exchange prices for 1923 crop, as announced last month are: Schleys, 65c per pound; Overgrade brand, 45c; Apex brand (mixed nuts), 40c; Junior brand, 30c.

Indications last month were that the pecan crop in Brown county, Texas, would be better this year than in a long time. Spraying has had much to do with favorable conditions.

A FINE PECAN GROVE FOR SALE

On a Georgia Estate of 192 Acres Worth \$100,000—Will Sell For \$58,000

This land is situated 4½ miles north of Valdosta, Ga. Thirty acres of this estate are in bearing pecan trees of choice varieties: Stuart, Van Deman, Schley, Teche, etc., trees ranging from 10 to 20 years old; 50 trees are of paper-shell seedlings of rich nuts.

Upward of seventy-five acres of this farm are clear, well-drained and in a fine state of cultivation; will produce a bale of Sea Island cotton to the acre and fine crops of tobacco. The farm is surrounded with good wire fence and ten or twelve iron gates. There are two large barns with stockade underneath for ten to fifteen head of stock. Soil is rich loam and solid clay. The wooded part is covered with large virgin yellow pine; the undergrowth is hickory, dogwood and ash. There are two dwellings all in good condition. Owner is 70 years old and desires to retire from active work.

Here is an estimate of returns in sight:

The pine timber on this land has been estimated by three different turpentine operators to cup a crop of virgin boxes for 4 years.

A crop of boxes will make 50 bbls. of spirits each year for 4 years.

A barrel of spirits is 50 gallons, and at \$1.75 per gallon the spirits will bring\$33,500.00

A crop of virgin boxes will make a barrel of N. Rosin to every barrel of spirits, and in 4 years you will have 1000 barrels of N. Rosin at \$15.00 per barrel, or.....\$15,000.00

\$48,500.00

Now take one-fourth off for expenses 12,125.00

This is about correct for the turpentine\$36,375.00

The sawmill timber has been estimated to cut 500,000 feet, and it is surely worth \$50 per thousand. This will make.....\$25,000.00

One-fourth of this off for expenses and you will have a total 6,250.00 of\$18,750.00

As to the stave wood: I have refused\$ 2,000.00 for it, and it is surely worth much more.

There are 10,000 cords of fire wood on this place; at \$2.50 per cord, it is worth.....\$25,000.00

Thirty acres of pecans at least..\$30,000.00

The estate is offered for \$58,000. The purchaser could dispose of timber, pecan grove or farm land to good advantage if desired, retaining the portion preferred.

Address South Georgia Estate, care of American Nut Journal.—Advt.

THE PECAN

Prospects Best Ever in Albany, Ga.

Albany, Ga., Sept. 26—At a recent meeting of the members of the National Pecan Growers Exchange a short discussion of crop prospects took place. The consensus of opinion was that nuts this year would run large in size and of good quality. Members who entered into this discussion estimated their 1923 crop to be about 400,000.

The Albany District Pecan Exchange which is a local, affiliated with the National, is making improvements and extensions to enroll it to handle the large tonnage expected this year due to the vastly increased membership of the National. The capacity will be more than doubled by the additions and improvements. A tonnage 50% greater than that of 1921 which was 550,000 is a conservative estimate of the 1923 prospects. It may pass the million mark.

ORRIN J. WENZEL.

At Ailey, Ga.

Ailey, Ga., Sept. 19—Condition of pecan trees is the best this year I have seen in several years, because there has been abundance of rain. There is a full crop of Schleys and Stuarts, but most of the other varieties have fallen off lately, I presume due to too much rain or scab.

J. W. PALMER, M. D.

At Dodson, La.

Dodson, La., Sept. 10—The prospect for a pecan crop is about 60 per cent. Late cold and too much rain at blossoming time did the greatest damage. And then the depredation by insect pests was considerable. The condition of trees where they have been grown the right kind of attention is all O. K. with the exception of varieties set out, that were not adapted to the climate.

There are no orchards of any large size being set out in this vicinity. Just a few trees here and there.

F. O. DAVIS.

80% Crop Well-filled Nuts

St. Martinsville, La., Oct. 2—We have an 80% crop of seedlings this year. Nuts are well filled and ripening rapidly, and threshing is going on. I know of no new plantings about to be made.

A good many top-worked trees grafted on seedlings and pignut stock are beginning to come into bearing.

J. R. OLIVIER.

Southern Pecan Growers Association

New Co-operative Body Oversubscribes Its Minimum Quota—Contracts Still Coming In—Next Year a Five-Year Contract and a Minimum of 1,000,000 Pounds

At a recent meeting organization of the Southern Pecan Growers Association was completed with the election of the following officers:

President—R. B. Small, Macon, Ga.

Vice-Pres—H. K. Miller, Monticello, Fla.

Treasurer—P. J. Brown, Albany, Ga.

Secretary-Manager—Harry U. Jackson, Bampton, Ga.

Executive Committee—B. W. Stone, J. M. Patterson, P. J. Brown, R. B. Small, Harry U. Jackson.

Directors—R. B. Small, Dr. N. C. Alston, Harry U. Jackson, A. M. Wynn, H. K. Miller, James S. McGlennon, B. W. Stone, J. M. Patterson, P. J. Brown, H. H. Simmons.

A contract and marketing agreement has been provided. It is drawn up on lines advocated by the co-operative marketing expert, Mr. Sapiro. This contract is now being signed by pecan growers who desire to market through this association. Already a large quantity of nuts have been listed with the organization.

The Southern Association announces the following prices:

Schley Overgrade, 80c; Schley No. 1, 65c; Schley No. 2, 50c.

Stuart and similar standard varieties: No. 1, 45c; No. 2, 35c; Blended, 40c; Mobiles, 35c to 45c; Moneymaker, 35; Moore, 35 to 45c; Teche, 30 to 35.

"The merits of the co-operative marketing need no further arguments—watch the trend of the times. If we will but visualize the future of the pecan industry, keeping in mind that "History repeats itself", let us forestall the inevitable experience that has come to the growers of walnuts, almonds, raisins, citrus fruits, melons, cotton, and peanuts.

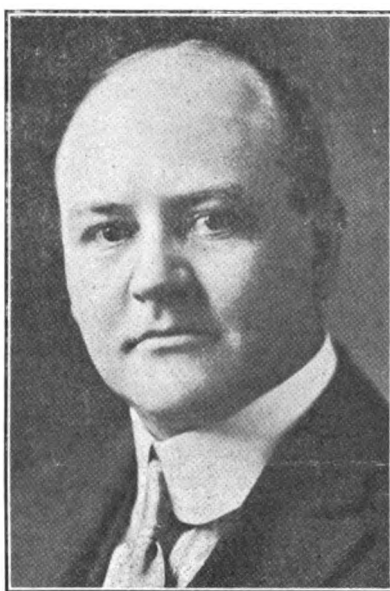
"The fate of the pecan industry is in the hands of the growers. The price you will receive this year for pecans is of great concern to you; the price you will get five years from now should be of greater concern. CO-OPERATIVE MARKETING is the ANSWER.

"Our minimum volume for operation is 250,000 pounds by November first. We have voluntary subscriptions for more than half this amount, and expect this volume to be swelled to double our minimum quota.

"The Sapiro plan of marketing allows us to sell only the products of its members, so it will be necessary for you to become affiliated with this organization in order to get the benefit of our marketing service.

"For the benefit of our members we are arranging to advance fifty percent of the value of the pecans when delivered to our Association headquarters, Albany, Ga.

"We cordially and earnestly invite you to join the Southern Pecan Growers Association. If you are interested kindly write our secretary who will mail you a copy of the contract. If after reading the contract you desire to join us, sign same and return to Harry U. Jackson, Secty-Mgr., Albany, Ga."



R. B. SMALL, Macon, Ga.
President Southern Pecan Growers Assn.

Half a Crop at Dallas, Tex.

Dallas, Tex., Sept. 28—About one-fourth of a crop from native trees; something less than half a crop from named varieties. A sharp freeze just before the spring equinox and wet weather during flowering period had much to do in preventing a full setting of nuts.

Two new plantings, one of 20 and the other of 25 acres; a great increase in planting better sorts on residence grounds. Also

a market increase in top-working of native trees on residence grounds as well as in the country on lands belonging to city people; have personal knowledge of something over 2000 such trees worked during the past season. Farmers in the country are giving no appreciable attention to this line of endeavor.

As a rule, northern people and foreigners are taking leading interest in pecan culture.

CHAS. L. EDWARDS.

I AM RETIRING FROM BUSINESS!

MY PATENTS—INDUSTRIAL INTERESTS—MACHINERY FOR SALE ON EASY TERMS



Address **FANNIE S. SPITZ,**
323 North Tenth Street ALBUQUERQUE, N. M.
Proprietor of the F. S. S. SUNSHINE NUT-SHELLING AND SEPARATING MACHINES.
Patentee and Sole Manufacturer of the Seven-Year Tested, Sanitary, Approved, Specialty Machine for Shelling and Separating Pinon Nuts.

NO AGENTS

REFERENCES REQUIRED

The Round Table

Raising Pecans Is Profitable, All Right

"Yes, we're nut growers, but that doesn't mean we're nuts," is the way H. K. Miller, of Monticello, Fla., put it to a Jacksonville Journal reporter during the National Pecan Growers convention. Mr. Miller, student and scholar in chemistry, college graduate, college professor and pecan grower isn't sorry he forsook the pedagogue's chair and the home of the professor for the plough, the sprayer and the farm house.

Starting in 1905 with "mostly credit," today he and his associates of the Summit Nurseries own a grove which they wouldn't sell for \$60,000, and it's getting to be worth more every day.

"There's only one place for nuts in our business," said Mr. Miller, "and that's on the tree, where they are worth from 40 to 60 cents a pound."

Brains, patience, foresight, care, watchfulness, self-denial, faith, nerve and hard work—these are the qualities the pecan grower must have and cultivate along with his land—and they're not to be found frequently in the nutty, opines Mr. Miller.

In 1895 Mr. Miller was entitled to put after his name the degrees of bachelor of science and master of science from Auburn. He looked for a chance to practice his profession, chemistry, and entered the faculty of the Florida A. and M. College in Lake City.

Ten years later he packed all his courage together and with some credit and some assistance from H. A. Gossett, professor of entomology at the A. and M., he bought a 40-acre, newly planted grove in Monticello. For the next ten years they eked out a slender living by selling pecan tree seedlings, and doing a general nursery business. Then the pecans began to appear in paying quantities on the trees.

His foresight hadn't been sleeping, however, and he had been setting out more and more trees. Now there are 4,000 of them on 200 acres.

But only the 40 acres are paying. Last year 18,000 pounds were harvested from this grove, bringing in a total of \$9,000, of which about 80 per cent was profit for that year. Of course, there had been the slim years, and the long ten years of waiting, but the same trees, not having quite so good a year this season, will still bring about 15,000 pounds.

"I really can't see where I figure myself to be a complete nut," said Mr. Miller. "Adjacent land is selling at \$40 an acre, without

trees, while my groves are bringing a good annual profit on a valuation of \$1,000 an acre, and only forty acres are paying anything.

"Pecan growing isn't a get-rich-quick scheme, and it needs the personal attention and care of the grower. But it's profitable, all right, and the national demand for pecans hasn't even been scratched. Variations in the crop don't affect the price at all, which is based simply on quality."

Mr. Miller isn't the only smart grower in the business, says the Journal. The biggest grower in America is J. M. Patterson of Putney, Ga., who controls 5,000 acres of trees, from which he has sold as much as 500,000 pounds of nuts, worth a quarter of



H. K. MILLER, Summit Nurseries,
Monticello, Fla.

million dollars, in a single year. He has 100,000 trees.

Other men of education and culture—and financial success who are in the business are Harry U. Jackson of Baconton, Ga.; H. W. Smithwick of Americus, B. W. Stone of Thomasville, Theodore Dechtel of Ocean Springs, Miss.; and H. H. Simmons of Jacksonville is considered to have one of the very finest groves.

Pecans In Southern Alabama

F. A. Spivey, Montgomery, Ala., says:

"I have about arrived at the conclusion that the Carnauba wax is the best medium to raise the melting point of commercial paraffin.

"The rains throughout the summer have been bad for pecan scab. I recently saw a nice grove of bearing Delmas trees practically ruined by the scab. I do not suppose your northern varieties are much bothered

by it. I intend to help the owner topwork the grove next spring to more resistant varieties. That seems to be the only remedy—to grow the resistant varieties.

"The trees I purchased from an Illinois concern came through all right with one exception, but they do not make the growth that our pecans make in a season. I really did not know that such rapid growth could be secured from pecans as I have this year. On a tree set this spring I have a little over four feet of growth. Considering that nut trees usually do not make much growth the first year, I think four feet the first year on a five foot tree when set out, is rather good. This variety is the Moore."

A Pioneer Pecan Sheller

Robert E. Woodson, St. Louis, Mo., inventor and manufacturer of the Woodson pecan sheller, exhibited his machine at the Jacksonville convention. Unfortunately he could not procure pecans with which to demonstrate its operation completely. The machine is widely used in the pecan shelling industry. Mr. Woodson has been in the pecan business 40 years. He remembers when he bought Texas native pecans for 2½ cents a pound delivered. Mr. Woodson long ago was a traveling salesman for the Barnhart Mercantile Co., St. Louis. He was vice-president of the company when he retired some time ago.

"In the early days," said Mr. Woodson, "we employed ten girls to crack the nuts by hand. Each used a small hammer and a piece of lead, cracking first one end, then reversing the nut and cracking the other end. Then, the company cracked a carload of pecans a season. Our company was the first and for a long time was the only one cracking pecans commercially. There are far less pecan trees in Texas than there were 35 years ago. Floods have destroyed many pecan trees, notably in the section around Wharton, Tex., which at one time shipped 150 carloads. That section now ships four or five carloads a season. The maximum commercial crop of native pecans now shipped from Texas is 700 carloads. Of this number there are but 25 carloads that do not have to be shelled. The pecans that come from Mexico are sold as polished nuts. We are approaching the time when a great proportion of the budded pecans will be shelled."

Increasing Pecan Interest

Brownwood, Tex., Sept. 11—Condition of pecan trees good. Prospects good for a fair crop. Estimate crop for state to be about like 1921. One reliable estimate is for only 200 cars this year.

I understand a number of orchards have been planted in Eastern Texas.

There is a growing interest in pecan culture in Texas, not speculative but actual investment of time and money. Extension service of Texas A. & M. College and U. S. Dept. of Agr., putting trained pecan men out as county agents. One county agent, Gillespie county, directed 400 farmers who budded over 2,000 buds one day last spring, on native trees. Special course in pecan culture at Texas A. & M. had 40 students enrolled last year.

Pres. Texas Pecan Growers Assn.
H. G. LUCAS,

If it relates to nut culture it should be in the AMERICAN NUT JOURNAL. Please send it in.

ALL INTERESTS CO-OPERATING

ATENTION to the mutual interests in the Nut Industry is succinctly directed by Manager T. C. Tucker of the California Almond Growers Exchange: "We are a strictly co-operative organization, including Grower, Broker, Wholesaler and Retailer"

This may be said also of organized effort in the production and distribution of Walnuts and Pecans, each of which is represented in Associations.

It is because of this co-operative feature that the American Nut Journal combines the news of the Nut Industry in the fields of Production and Distribution. Its Market and Crop Reports will be of increasing value.

It is of prime importance that the market shall be supplied; a supply is the basis upon which a market exists.

It is also of prime importance that a market be created and maintained; distribution of the product is what makes the industry.

The Journal desires to co-operate heartily with producer and distributor, and to that end welcomes frequent communications by way of comment on current events, personal mention, trade news and suggestions. It is the logical medium for interchange of trade comment and the recording of trade activities.

FOR SALE

20 acres in Paper Shell Pecan Trees; many bearing. One-half mile from high school on highway, Clinton, N. C.

R. H. HUBBARD, Wilmington, N. C.

TEXAS PECAN NURSERY

R. W. FAIR and W. V. HENSON, Owners
ARP, (Smith County,) TEXAS

The World's Largest Pecan Nursery

GROWERS of the BEST ROOTED and BEST DEVELOPED,
BUDDED and GRAFTED PECAN TREES GROWN.
90 to 100% LIVE and GROW, IF CARED FOR.



LOOK WHAT ROOTS!



The Root System
We Grow

The kind of Roots
Usually Grown

We grow roots on our trees like the ones shown on left of picture. **This Root System** enables our Pecan Trees to reach out in all directions and gather the **Necessary Moisture and Plant Food** to make thrifty bearing trees.

Haven't the trees you have been buying had roots like the ones shown on the right of picture? **Did they Live? Did They Give Satisfaction?**

The trees you set are the foundation to your grove or your investment. Can you afford not to buy the **Best Rooted, Best Developed and Best Blooded Trees** grown?

Our Pecan Trees are Better Acclimated to all states west of the Mississippi River, than any trees you can find, because they are grown right in the middle of the Pecan Growing States.

Our 10 Varieties have been selected to meet the needs of the above territory.

READ WHAT ONE OF OUR BIG CUSTOMERS THINKS OF OUR TREES

Shreveport, La., June 28, 1923.

Texas Pecan Nursery, Arp, Texas.

Gentlemen: The Pecan Trees purchased from you had a perfect root system, and practically every one put out the following spring. I consider your trees the **BEST PLANTING STOCK I EVER SAW**. My business relations with your firm has been perfectly satisfactory in every respect, having bought something like \$15,000.00 worth of Pecan Trees from you in the last two years. Hoping your business continues to grow, I am as ever,

Yours respectfully,
G. T. SHAW, (Planter).

We have had to turn down orders for thousands and thousands of Pecan Trees every season, on account of the great demand our wonderful Root System has created.

Write for our 56 page booklet on "How To Grow Paper Shell Pecans," and book your orders now while we can furnish what you want. Don't wait and be disappointed.

Texas Pecan Nursery,

R. W. FAIR, Manager
ARP, TEXAS

BUDDED and GRAFTED Nut Trees

Start right with my hardy Pennsylvania grown trees and be assured of success.

Attractive Catalogue Free. I have this season a fine lot of stake trained Pecan, English Walnut, Black Walnut and Persimmon trees budded on root pruned transplanted stocks, that will please you and that will transplant easily and safely. Write for catalogue.

J. F. JONES, The Nut Specialist
LANCASTER, PA.

Have You Nuts to Sell?

HICKORY NUTS BLACK WALNUTS
BUTTERNUTS CHESTNUTS

Hundreds of buyers are asking where the nuts can be obtained in quantity. Place your Sale Advertisement in the **AMERICAN NUT JOURNAL**, for quick returns. \$2.80 per inch.

39 State St., Rochester, N. Y.

If it relates to nut culture it should be in the **AMERICAN NUT JOURNAL**. Please send it in.

Manufacturers of all kinds of Barrels, especially for Pecans

PENSACOLA COOPERAGE CO.

PENSACOLA

FLORIDA

Albany Pecan Nut Exchange, Albany, Georgia

Now booking orders all varieties paper shell pecans S. A. P. Mail us list of your requirements to-day, for fall delivery.

FOR SALE

5 ACRE PECAN GROVE LOCATED IN THE UNITED PECAN GROVES AT PUTNEY, GEORGIA. TREES PLANTED 9 YEARS AND IN GOOD CONDITION—UNDER CARE OF PAPER SHELL PECAN GROWERS ASSOCIATION.

PRICE, \$2,500—A BARGAIN FOR QUICK SALE. ADDRESS G. E. HADDEN, 6016 HAYES AVE., LOS ANGELES, CALIF.

THIS SPACE

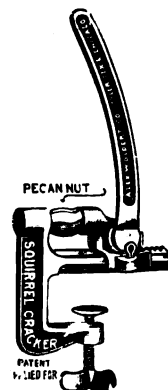
\$2.50 Per Month Under Yearly Contract
Under less than yearly term:
\$2.80 Per Month

Squirrel Nutcracker

BEST ON EARTH

Cracks the shell but not the kernel. Very simple; operates faster and better than any hand power nutcracker known.

Alex Woldert Co.,
TYLER, TEX.



BARGAIN For QUICK SALE

12 Acre Pecan Grove, located in Springdale Pecan Groves, about 14 miles from Jefferson County Court House, at Monticello, Florida, on the Thomasville Road, containing over 200 pecan trees, 50 citrus and other fruit trees and grape vines—many of the trees beginning to give returns. Improvements: Nice little cottage, nearly new, fully furnished for a man and his wife; porches and windows copper wire screened. Drilled well 165 feet deep, 3 H.P. Western Electric engine, double pump, pressure tank, hot and cold water in kitchen, and fully equipped bath room. 185 feet cemented tile drain; lots of space for growing kitchen garden truck. For price, etc., address,

JOHN W. KIRK,
134 Elm Avenue Mount Vernon, N. Y.

AMERICAN NUT JOURNAL, the Official Journal, three years for \$5.00; twelve months, \$2.00; single copy 20c.

THE WILCO PECAN CRACKER

Cracks 180 pecans per minute with maximum of halves and minimum of picking.

BUILT to LAST, completely enclosed and safe from usual troubles and breakage.

Let us send you full details

The Wilco Machine Co.

3560 Chouteau Ave. St. Louis, Mo.

BARGAIN IN FLORIDA PECAN GROVE AND HOME

In order to close up an estate I offer for sale six-acre bearing pecan grove (in heart of pecan district). 1 block to good school. In this grove there is a large 10-room house, large barn, double garage with pecan drying rooms, and other out buildings, all for \$10,000 cash. This grove is situated at Starke, Florida, 45 miles South of Jacksonville on the State highway and cross county road. If interested, write to

F. A. SCOTT, STARKE, FLA.

Budded and Grafted

HARDY NORTHERN NUT TREES

Best varieties, grown in natural nut soil. Send for catalog. Have your seedling nut trees topworked to these fine varieties.

Information and estimate on request.

INDIANA NUT NURSERY

Rockport, J. F. Wilkinson, Prop. Indiana

Manual of

WALNUT GRAFTING

The Biederman Method is fully described and illustrated. It is applicable to pecan, hickory and chestnut. Of special value in topworking, because it does away with use of ladders.

Price 75c per copy postpaid.

W. N. Y. PUBLISHING CO.,

BOX 124
Rochester, N. Y.

American Fruits Company's Library Opportunities

PRACTICAL BOOKS ON HORTICULTURE, NUT GROWING, NURSERY PRACTICE

Any of the following books will be sent on receipt of price by AMERICAN FRUITS PUB'G CO.,
123-125 Ellwanger & Barry Bldg., ROCHESTER, N. Y. Prices subject to change.

American Apple Orchard By F. A. Waugh.....	\$1.90	Irrigation for the Orchard—Stewart.....	1.75	Plant Propagation; Greenhouse and Nursery Practice—M. G. Kains....	2.40
American Fruit Culturist By John J. Thomas.....	3.65	Land Drainage—Joseph H. Jeffrey..	2.15	Plant Physiology—B. M. Duggar....	3.00
American Fruit Farm—F. N. Thorpe.....	2.65	Landscape Gardening—Downing's Famous Work—10th Edition— Revised by Waugh.....	6.00	Pomology, Text-book of—Gourley....	2.75
American Grape Culture—Munson.....	2.65	Landscape Gardening—House and Garden's Book of Gardens, 9 1/2 x 12 1/2, 400 Illustrations.....	5.15	Practical Forestry—A. S. Fuller....	2.15
American Grape Growing and Wine Making—George Husmann.....	2.15	Landscape Gardening—Kemp—Re- vised by F. A. Waugh.....	2.15	Practical Fruit Grower—Maynard....	1.00
American Horticultural Manual By Budd-Hansen, two vols....	3.30	Landscape Gardening—Maynard.....	2.65	Practical Tree Repair—Peets.....	2.65
American Peach Orchard—Waugh.....	1.90	Landscape Gardening—The Small Place—By Elsa Rehmann.....	3.65	Principles of Agriculture—Bailey....	2.00
Bulbs and Tuberous-Rooted Plants.....	2.15	Landscape Gardening—Cridland.....	2.65	Productive Orchard—F. C. Sears.....	2.65
Bush Fruits—By F. W. Card.....	3.15	Landscape Gardening—The Com- plete Garden—Albert D. Taylor.....	6.15	Principles of Fruit Growing—Bailey	2.65
California Fruits and How to Grow Them—E. J. Wickson, A. M....	4.15	Landscape Gardening—O. C. Simonds	6.15	Principles of Pruning—Kains.....	2.65
Citrus Fruits—J. E. Colt.....	3.40	Manual American Grape Growing— Hedrick.....	3.40	Pruning Manual—By L. H. Bailey....	2.65
Commercial Apple Industry of North America.....	3.65	Making Horticulture Pay—Kains....	1.90	Putnam's Garden Hand Book.....	2.00
Cyclopedia of Hardy Fruits By U. P. Hedrick.....	6.20	Manual of Fruit Diseases—L. R. Hessler, II. H. Whetzel.....	3.15	Quince Culture—W. W. Meech.....	1.35
Dwarf Fruit Trees—Waugh.....	1.00	Manual of Fruit Insects—M. V. Slingerland, C. R. Crosby.....	3.90	How To Grow Roses—Robert Pyle..	1.50
Farm Bureau Movement—O. M. Kille	2.15	Manual of Gardening—L. H. Bailey	3.40	Rose—H. B. Ellwanger.....	1.40
Fertilizers and Crops By Dr. L. L. Van Slyke.....	3.40	Manual Tropical and Sub-tropical Fruits—Popenoe.....	3.90	Rose in America—McFarland.....	3.15
Fertilizers—Edward B. Voorhees....	2.65	Manual of Tree Diseases—Rankin....	3.40	Sales Promotion By Mail.....	2.15
Field Notes on Apple Culture By Dr. L. H. Bailey.....	.90	Manual of Vegetable Garden Insects By Crosby & Leonard.....	2.90	Small Fruit Culturist—A. S. Fuller..	1.75
First Principles of Soil Fertility By Alfred Vivian.....	1.50	Manures and Fertilizers—Wheeler..	2.65	Soils—E. W. Hilgard.....	4.25
Forests of N. Y. State—Recknagel..	2.65	Modern Fruit Marketing—Brown....	1.90	Soils—Lyon-Fippin-Buckman.....	3.40
Fruit Growing in Arid Regions.....	2.75	Modern Propagation Tree Fruits— B. S. Brown.....	1.65	Soils—F. H. King.....	2.40
Fruit Garden—P. Barry.....	2.40	Nature's Garden—Neltje Blanchan..	6.30	Soils—By Charles W. Burkett.....	1.90
Fruit Harvesting, Marketing—Waugh	1.90	Nursery Manual—Dr. L. H. Bailey....	2.65	Spraying Crops—C. M. Weed.....	1.00
Fruit Insects—Crosby.....	3.90	Natural Style Landscaping—Waugh	2.65	Standard Cyclopedia of Horticulture Edited by L. H. Bailey. In six vol- umes. 3,600 pages. 4,000 text engravings. 96 sepia halftones. 500 collaborators. May be had on installment payments.....	40.00
Fumigation Methods.....	1.90	Nut Culturist—Andrew S. Fuller....	2.15	Strawberry in North America—S. W. Fletcher.....	1.90
Gardening for Pleasure—Henderson..	2.15	Nut Growing: Latest Information; Guide to Propagating—By Rob- ert T. Morris.....	2.65	Strawberry Growing—S. W. Fletcher	2.40
Gardening for Profit—Henderson....	2.15	Old Time Gardens—Alice M. Earle..	2.65	Success in the Suburbs—John R. Mc- Mahon.....	2.15
Grape Growers Guide—Chorlton.....	1.65	Ornamental Gardening—E. A. Long..	2.15	Successful Fruit Culture—Maynard..	1.75
Grape Culturist—A. S. Fuller.....	2.15	Principles of Floriculture.....	3.40	Surgeon's Philosophy—Dr. R. T. Morris.....	3.15
Greenhouse Construction—Taft.....	2.40	Parsons on the Rose—Parsons.....	1.75	Systematic Pomology—Waugh.....	1.90
Greenhouse Management—Taft.....	2.40	Peach Culture—J. A. Fulton.....	1.65	Ten Acres Enough—I. P. Roberts....	1.75
Hedges, Windbreaks, Shelters.....	1.00	Peach Growing—By H. P. Gould....	2.65	Wild Fruits, How to Know—Peterson	2.15
Roses—How to Grow—Robert Pyle..	1.50	Pear Culture for Profit—Quinn.....	1.35	Wind and Weather—McAdie.....	1.40
Injurious Insects—F. L. Washburn..	2.65	Picturesque Gardens—Henderson....	2.25		
Insects of Economic Importance— Herrick.....	2.15	Plant Breeding—By Dr. L. H. Bailey	3.40		
Insect Book—Dr. L. O. Howard.....	6.30				
Insects and Insecticides—Weed.....	2.15				
Insect Pests of Farm, Orchard and Garden—Sanderson and Peairs..	4.65				
Insecticides and Fungicides.....	3.20				
Irrigation Farming—L. M. Wilcox....	2.40				

A paper which gives the best value for the money to the reader will give the best value to the advertiser as well. I don't think there is any argument about the soundness of this view.—H. Dumont, Chicalo, Ill., in Printer's Ink.

WANTED Names and Addresses of Owners of Groves of Native Nut Trees in Northern States.

In the interest of Northern Nut Culture this Journal desires the above information to serve as a basis for extension of Nut Culture.

Readers will confer a favor by sending us lists of names and addresses of those who have stands of nut trees on their property, (with some account of productivity if practicable). Black walnut, English walnut, butternut, hickory, chestnut, filbert, etc.

American Nut Journal P.O. Box 124 **Rochester, N. Y.**

If it relates to nut culture it should be in the AMERICAN NUT JOURNAL. Please send it in.

AMERICAN NUT JOURNAL, the Official Journal, three years for \$5.00; twelve months, \$2.00; single copy 20c.

A NEW BOOK! NUT GROWING

By Robert T. Morris

The latest and only up to date book on the newest and one of the most important branches of Horticulture, giving a broad survey of a rapidly growing industry. Detailed explanation of successful methods of propagation and the new process of grafting with the use of paraffin; illustrated.

An invaluable work for all nut growers.

Price \$2.65, Postpaid

AMERICAN FRUITS PUB'G. CO.
39 State St., BOX 124, Rochester, N. Y.

The Logical Market Place for Sale of Nuts The Advertising Columns of the American Nut Journal. Chief Exponent of the Trade.

Hundreds of Readers of this Journal Ask for Pecan Nuts in Moderate Quantity at Prices Less Than the Retail Price per Pound in Northern Markets. They Would Be Eager Buyers if They Knew Where to Apply. If There is Any Surplus at Any Time, the Advertising Columns of this

Journal Will Dispose of It. Rate, \$2.80 per Inch. Announcement Should be Maintained the Year Around (Yearly Rate, less than 60 Cents per Inch a Week) to Secure Best Results. Make Your Name a Household Word Wherever Pecans Are Wanted. Make It Easy To Procure Them.

AMERICAN NUT JOURNAL P. O. Box 124 **ROCHESTER, N. Y.**

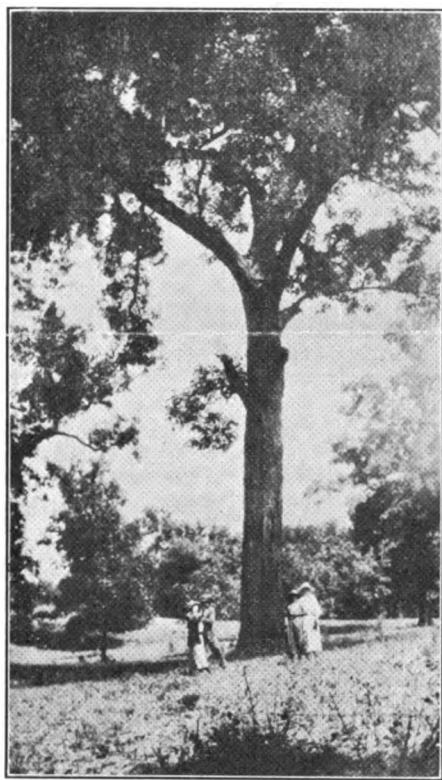
American Nut Journal

**DEVOTED TO NUT GROWING INTERESTS
GENERALLY THROUGHOUT THE AMERICAS**

Vol. XIX. No. 5

NOVEMBER, 1923

Per Copy 20c.



THE WORLD'S LARGEST PECAN TREE

On the bank of the Colorado river, in San Saba county, Texas, 12 miles from San Saba. Height (estimated) 120 ft. Diameter at two feet above ground, 7½ ft. Circumference at that point, 24 ft. 6 in. Diameter 10 feet above ground, 6 ft. Height to first limb, 41 ft. Estimated age, 800 to 1,000 years. Largest measured crop produced, between 1,400 and 1,500 pounds. Photo by A. W. Woodruff. (See page 88.)

39 STATE ST.



ROCHESTER, N. Y.

American Fruits Publishing Co.

Thirty Years With Pecans

By D. F. Moore, Bend, Texas

THIRTY years ago, February 1893, I planted my first pecans on Alarm Creek, Erath County, Texas. They were the Hollis, from the native tree at Bend, Texas. To my surprise at that time, out of 140 trees I did not get any Hollis pecans. These trees have been bearing about twenty years but have never borne a Hollis pecan; and they never will, unless they are budded or grafted with Hollis.

I want everyone who reads this article to understand that I am not using other men's ideas but am referring to my own experience. Quite a number of Nurserymen are telling what to plant and how to plant. Most of them know more about it than those who are going to plant. In my opinion it is difficult to advise what to plant, for there have been successes and failures under all conditions. A success with a variety in one location may not be a success in another. Some of our pecan experts say, percentage of kernel, cracking quality, thinness of shell, color, flavor, size, bearing quality, vitality of the tree, etc., are chief considerations. My experience and your reason will say by all means plant the tree that grows well and bears well the kind of nuts that will sell well—the tree that does this under the conditions and in the soil you have, as nearly as possible. Size is a large factor for it will bring a higher price than a small pecan that excels it several points in quality. One Nurseryman may say: "My trees are the only ones that will live or grow." If the Nurseryman digs his trees carefully and gets them to the planter in good condition, he has very little to do with the living or growing. I have set trees with lots of roots that died and have set trees with nothing but tap root and they lived. Even cutting will grow the finest root system of any, but they make slow growth for two years. Nearly every pecan tree the planter gets will live if it is in good condition when received and is planted right. It pays to get an experienced man to plant the trees even if there are no more than a dozen of the trees. Deeper and wider holes

are needed. Do not buy trees budded from young trees that are not bearing, unless the object is simply to produce shade trees. We have bought trees from beautiful pictures and oratorical descriptions by salesmen long enough. Millions of dollars have been wasted. The planter should find out what is best for his soil and climate and demand that. The source of information must be other than the Nursery salesman. Some salesmen do not know a pecan tree from a cotton stalk.

Most of us go into the pecan business for the money there is in it. I believe the Hollis pecan tree at Bend, Texas, has brought more money in one season than any other pecan tree in Texas or probably anywhere else. It bore in one season 1035 pounds of pecans which retailed at \$1 per pound. This is supported by affidavit. I have known this tree for 50 years. There were nuts on this tree whenever there were any in this section. But I do not say that the Hollis will do that everywhere. Under the same conditions the parent tree has, one might beat it. Under different conditions there might be entire failure. I think the Hollis tree shows the great possibilities for pecan culture in the South.

Shortage in Native Nuts

Horticulturists report a nation-wide nut shortage. This report was made following the usual exchanges between horticulturists and the heads of the park departments throughout the country. The belief is expressed that the freeze of May 9 is responsible for the non-development of the crop. Squirrels and other animals which depend on nuts for food are storing substitutes, it is said.

John Dunbar, assistant superintendent of parks, has received the following reply from Charles C. Deam, forester for the department of conservation, State of Indiana, in reply to a request for acorns of *Quercus Michauxii*:

"I am sorry to report to you that I did not see this species in fruit. On May 9, this year, we had a freeze that killed practically all tree and shrub seeds. I have just got in from a five weeks' trip during which I never saw such a paucity of seed in my life."

The Secret of This Success.

The Cape Cod Strawberry Growers' Association they call themselves, this band of 100 Portuguese farmers, who are working out their economic freedom through co-operative marketing. The members can neither read nor write English, yet they understand the true principles of co-operation, the United States Department of Agriculture says.

Here is the record made by these Portuguese farmers: In 1916 the association marketed approximately 800,000 quarts of berries at a gross value of \$49,000. The next year their output was only 334,000 quarts, but the gross price received was \$38,000. In 1921 the return for 569,000 quarts was \$128,000, or nearly 200 per cent more than was received for a larger crop in 1916. This year the crop was 1,045,000 quarts and the gross return \$133,000.

The secret of success of the association is a high quality product, carefully graded and packed. Each day's shipments are pooled and sent to Boston on consignment. A demand has been created that takes principally all the berries the association can market.

Eight producer-owned-and-controlled associations marketed nearly 600,000,000 pounds of tobacco of the 1922 crop, the United States Department of Agriculture reports. Total membership of the 8 associations is 259,840. The quantity marketed by co-operatives was nearly one-half the total crop produced.

Peanuts were imported into the United States during 1922 to the amount of: Unshelled, 3,115,297 pounds; shelled, 8,050,992 pounds. The grand total of 11,166,289 pounds compares with a total of 40,163,962 for the calendar year 1921. Exports from the United States: 1922, 12,621,202 pounds; 1921, 14,492,652. Why import 11,000,000 pounds when we have 12,000,000 pounds to send away? To make business for handlers and common carriers?

AMERICAN NUT JOURNAL, the Official Journal, three years for \$5.00; twelve months, \$2.00; single copy 20c.



NEW EDITION FREE

A practical guide showing how to bud pecans. Tells how to grow trees 12 inches in diameter by the end of the 8th year, which yielded 400 lbs. nuts per acre.

Trees, Nuts, Groves for sale direct without agent at attractive reduced prices
B. W. STONE, Thomasville, Ga.

PECAN TREES

100,000 TREES—STANDARD VARIETIES
WE GROW NOTHING BUT PECAN TREES
HIGH QUALITY—SERVICE THE BEST

SIMPSON NURSERY CO., MONTICELLO, FLA.

SUCCESS

and other leading varieties. Also citrus
BECHTEL PECAN NURSERIES
Ocean Springs, Miss.

PECAN TREES

We Grow Them Right
We Pack Them Tight
We Price Them Right

Southern Nut Tree Nurseries,
THOMASVILLE, GA.

ORCHARD OWNERS OF THE SOUTH-EAST AND GULF STATES

Reports furnished on pecan and fruit orchards, giving variety, age, size and condition of each tree; also notes on general conditions and needs of orchards. Care and management of orchards a specialty.

HORTICULTURISTS INCORPORATED
6th Floor, Exchange Bank Building
Albany, Ga.

MONTICELLO NURSERY COMPANY, MONTICELLO, FLA.

One of the oldest nurseries in the Gulf States. Winners of the prize for the best quality pecan in the world, in "The Best Pecan Contest" held at Bend, Texas, in 1921.

All of our pecan trees are budded and grafted with wood cut from bearing orchard trees. Quality and service of the best.

Trifoliata seedlings and all standard varieties of pecan trees.

WRITE for CATALOGUE and PRICES
We are buyers of all varieties of Pecan Nuts.

MONTICELLO NURSERY COMPANY, F. A. Mahan, Mgr.

PECAN TREES

Plant them this year! Buy direct from nursery and save agent's profit. All standard varieties; quality and service the best. Write us for prices.

FLORIDA NURSERIES

W. W. Bassett, Prop., Monticello, Fla.

THE WOODSON PECAN SHELLING MACHINE IS STILL IN THE LEAD

Built and runs like a "Packard", and is in use by over 90 per cent of the Commercial Pecan Shellers in the United States.

Also Manufacturer of the Woodson Automatic
PECAN GRADING MACHINE

There is a reason why 90 per cent of the Commercial Pecan Shellers of the United States use the WOODSON machine.

WRITE FOR CATALOG TO

ROBERT E. WOODSON

Inventor and Manufacturer

3763 Forest Park Ave.

St. Louis, Mo.

Nurserymen Should Know

That one of the fastest growing industries in the country is

NUT CULTURE

Demand for information as to Nursery-grown Nut Trees is insistent on all sides. Full information by specialists appears regularly in

AMERICAN NUT JOURNAL

Leading National Publication of the kind

Subscription \$2.00 Per Year

Advertising Rate \$2.50 per inch

AMERICAN FRUITS PUBLISHING CO., Inc.

39 State St., ROCHESTER, N. Y.

AMERICAN NUT JOURNAL --- NOVEMBER, 1923

EDITORIAL DEPARTMENT—Communications on any subject connected with Nut Growing and Distribution are cordially invited by the editor; also articles on this subject. We shall be pleased to reproduce photographs of trees of interest, methods and scenes connected with the Nut Industry; portraits of individuals, etc. Suggestions are cordially welcomed.

ADVERTISING—Advertising forms close on the 10th of each month. If proofs are wanted, copy should be in hand on the 1st. Advertising rate: 20 cents per agate line; \$2.90 per column inch for any amount of space.

Advertisements that do not represent reliable concerns will not be accepted.

SUBSCRIPTIONS—The "American Nut Journal" will be sent to any address in the United States for \$2.00 a year; to Canada or abroad for \$2.50 a year. Three years: In United States, \$5.00; Canada, \$6.50.

Add ten cents for exchange unless bank draft, express or postal money order is used.

WHAT THIS JOURNAL STANDS FOR—Reliable information on all phases of the Nut Industry. It is for the advancement of Nut Growing in general; it is in no way confined to the interest of a particular kind of nuts, nor of a particular section. It is broad in scope and absolutely independent. The aim of "The American Nut Journal" is to stimulate thousands of persons into developing interest in one of the greatest food supplies of the future—to line the roadsides and fill the waste places with trees of a sort which yield dollars worth of fruit every year instead of the mere bunches of leaves resulting from present shade and ornamental planting. At the same time it will record the progress of the industry, the latest descriptions in the note book of the biologist and plant physiologist, the rapidly expanding knowledge of methods, the increasing acreage, and in short the news as it develops of an industry whose importance is recognized by an increasing number of persons in all sections.

Entered as second-class mail matter June 6, 1914, at the post office at Rochester, N. Y., under the Act of March 3, 1879.

AMERICAN FRUITS PUBLISHING COMPANY INC.

Ralph T. Olcott, Editor and Manager

121-123-125 Ellwanger & Barry Bldg., Rochester, N. Y.

Classified Business Announcements In This Issue.

Albany Pecan Nut Exchange	Marketing of Pecans.....	99	"Nut Growing"	New Book	100
Bassett, W. W.....	Pecan Trees	82	Nuts as Staple Food.....	Dr. J. H. Kellogg.....	98
Bechtel's Pecan Nurseries.....	Grafted Pecan Trees.....	82	"Nut Trees for the North".....	Expert Advice	98
Field Force Pump Co.....	Sprayers	99	Pensacola Cooperage Co....	Pecan Barrels	99
Florida Nurseries	Pecan Trees	82	Pearcy Bros. Nursery.....	Filbert Trees	99
Hadden, G. E.....	Pecan Grove for Sale.....	99	Selkirk, Edward A.....	Eastern Grown English Walnuts..	97
Horticulturists, Inc.....	Southern Pecan Experts.....	82	Selkirk, Edward B.....	English Walnut Grove.....	99
Indiana Nut Nursery.....	Northern Pecan Trees.....	99	Simpson Nursery Co.....	High Grade Pecan Trees	82
Jones, J. F.....	Grafted Pecan Trees.....	99	Southern Nut Trees Nurs...	Pecan Trees	82
Kelsey, J. J.....	Buddy Nut	99	Stone, B. W.....	Pecan Trees, Nuts, Groves.....	82
Lancaster Nut Nurseries.....	Northern Nut Trees.....	99	Summit Nurseries	High Grade Pecan Trees	99
Logical Market Place.....	For Selling Nuts	100	Texas Pecan Co.....	Special Announcement	99
Manual of Grafting.....	Biederman Method	99	Wilkinson, J. F.....	Grafted Pecan Trees	99
Monticello Nursery Co.....	Budded and Grafted Pecan Trees..	82	Woldert Co., Alex.....	Squirrel Nut Cracker.....	99
Northern Nuts	Sources Wanted	100	Woodson, Robert E.....	Nut Cracking, Grading Machines..	82
Nut Cracker Patent, Etc....	For Sale	99			

IMPORTS OF NUTS INTO THE UNITED STATES, FOR CONSUMPTION, DURING THE LAST THIRTEEN YEARS (Compiled by Bureau of Commerce and Navigation, Department of Commerce, Especially for the "American Nut Journal.")

KIND	1909	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919	1920	1921
Almonds—not shelled.....lbs.	2,120,632	6,810,056	3,762,654	5,242,563	2,363,890	5,501,059	4,684,598	2,368,369	4,901,168	6,149,374	7,482,538	6,480,782	5,008,215
Shelled.....lbs.	8,538,054	10,496,750	12,160,636	11,692,968	12,655,057	13,896,821	12,168,153	13,210,668	19,160,258	21,644,767	28,007,908	18,769,626	21,572,634
Apricots and peach kernels lbs.		27,854	13,551	7,939	18,769	18,572	67,164	11,926	250,075			65,176	32,088
Coconuts in the shell.....Dollars	\$1,246,463	\$1,298,970	\$1,704,262	\$2,012,203	\$1,793,713	\$2,150,500	\$1,593,666	\$1,891,328	\$2,563,560	\$2,490,368	\$4,053,282	\$4,239,221	\$2,363,609
Coconut Meat broken or Copra not shredded, dehydrated or prepared.....lbs.	23,742,518	20,830,539	38,081,984	64,505,787	54,283,592	44,459,158	88,690,382	108,507,765	247,043,127	430,649,332	268,637,781	215,188,461	189,329,950
Dessicated, shredded, cut or similarly prepared.....lbs.	5,461,602	5,985,308	6,961,850	5,396,465	6,826,095	9,307,924	5,866,906	7,947,380	10,491,796	20,269,909	29,637,874	30,631,029	35,663,497
Cream and Brazil.....bu.	409,644	461,496	277,679	211,601,006	11,933,139	11,431,531	21,483,318	12,489,217	16,253,023	11,282,068	14,076,338	15,035,436	17,102,046
Filberts—not shelled.....lbs.	7,365,837	10,026,961	10,084,987	8,375,890	8,586,278	10,36,072	10,922,248	10,003,552	16,468,547	7,432,824	16,747,349	14,968,364	14,062,386
Shelled.....lbs.	1,413,391	2,332,606	1,368,835	1,450,620	1,798,147	1,722,705	1,269,540	1,269,540	2,280,757	4,245,563	3,778,906	4,711,283	4,233,197
Marrons, crude.....lbs.		10,270,386	9,968,879	14,845,345	10,157,321	18,849,257	12,549,859	15,754,796	6,275,030		5,021,146	29,484,637	23,340,966
Olive nuts, ground.....Dollars	\$690	\$476	\$236	\$206	\$342	\$385	\$25	\$112	\$420			\$132	\$189
Palm and Palm Nut Kernels.....Dollars	\$2,752	\$6,907	\$5,744	\$7,970	\$4,872	\$23,127	\$31,900	\$1,104,885	\$626,435	\$16,905,313	\$5,610,056	\$8,329,054	\$200,194
Peanuts or Ground Beans.....lbs.	7,326,371	11,297,172	11,055,823	12,690,433	12,140,612	17,298,778	14,075,387	9,623,411	7,710,082	1,970,787	5,667,354	7,222,486	4,863,677
Shelled.....lbs.	1,302,919	16,098,919	7,821,505	3,127,829	7,823,173	21,819,101	11,695,507	19,739,888	27,548,928	67,746,531	24,179,897	103,552,456	99,466,806
Pecans.....lbs.	1,480,289	3,348,400	2,333,037	2,607,227	1,803,434	2,621,161	2,032,539	1,265,382	4,076,833			2,194,680	1,062,390
Walnuts—not shelled.....lbs.	17,432,885	23,268,974	21,146,116	22,208,845	16,363,046	16,134,211	20,868,326	22,610,418	17,177,892	3,304,003	21,235,078	17,339,066	31,821,639
Shelled.....lbs.	8,781,908	10,960,968	11,244,084	10,713,286	10,093,622	11,636,053	10,532,956	13,445,790	12,257,583	9,707,401	10,360,899	13,972,917	13,264,069
All other shelled or unshelled, not specially listed.....lbs.	9,938,337	3,584,544	2,962,663	3,050,989	3,600,056	7,426,313	3,272,492	2,772,589	2,769,634			3,763,973	3,880,676
Total of nuts imported.....Dollars	\$8,549,987	\$12,775,196	\$14,265,572	\$15,626,485	\$13,508,307	\$19,815,713	\$16,865,244	\$20,594,434	\$33,667,688	\$49,930,283	\$57,499,090	\$68,762,801	\$87,578,572

Contents of Three Preceding Issues of the "AMERICAN NUT JOURNAL"

AUGUST 1923

Chain of "Cash" Nut Stores
Feature of Big City Merchandising
The Rise of the Southern Pecan
By William P. Bullard
Northern Nut Growers Plan Meeting
Southern Pecan Growers Exchange
Seven Virtues of the Perfect Pecan
By Sam H. James
Where to Plant the English Walnut
Program for National Pecan Association
Field Observations in Central Alabama
Origin of Leading Pecan Varieties
By Prof. E. L. Overholser
Nut Growing in British Columbia
Nut Notes from Illinois
Bark Beetle Solves Mystery
Pecan Culture in California
Japanese Walnuts, Pecans in Indiana
Georgia Pecan Tree Ceremonial
Crop and Market Reports

SEPTEMBER 1923

Planting and Care of Pecan Orchard
By C. A. Simpson
Million Pecan Trees for N. C.
Georgia Opportunities Unsurpassed
Iowa Exhibit of Edible Nuts
Mexican Pecan Conditions
Curly Grain Black Walnut
An Enormous Power Plant
Practical Questions in Nut Culture
Awakening the Slumbering Public
Numbering System for Pecan Orchards
Study of Variations in Pecans
English Walnuts in the North
Wholesale Cracking of Black Walnuts
What Can Be Done in Michigan
Strong Demand for Nut Trees
What Co-operative Marketing Does
Pacific Coast Walnuts in East
Co-operative Pecan Marketing
Crop and Market Reports

OCTOBER 1923

Northern Nut Growers Convention
Nuts for the Northern States
Commercial Culture of Black Walnut
By T. P. Littlepage
New Methods of Nut Grafting
By Dr. Robert T. Morris
National Pecan Growers Convention
High Records in Pecan Production
Value of Pecans in the Diet
Symposium on Co-operative Marketing
Experts Cite Best Pecan Varieties
President Simpson's Address
Developing a Pecan Orchard
By J. B. Wight
Notes from Experimental Nut Orchard
Nursery Grown Trees for Roadsides
Conditions in the Albany District
Southern Pecan Growers Association
Raising Pecans is Profitable
Crop and Market Reports

CO-OPERATION IN THE MARKETING OF PECANS

ADDRESS BY CHARLES J. BRAND, CONSULTING SPECIALIST IN MARKETING, U. S. DEPARTMENT OF AGRICULTURE, AT ORGANIZATION MEETING OF THE SOUTHERN PECAN GROWERS ASSOCIATION, IN ALBANY, GA., SEPT. 7, 1923

With a Pecan Crop in a Single Year from 19,000 Farms in a Single State Amounting to 2,544,000 Pounds, Pecan Growers Are Approaching the Point Where They Must Confront a Marketing Project of the First Magnitude—With Over One-third of the Non-bearing Pecan Trees in the Six Great Pecan States, Georgia Must Think Seriously of What Crops of the Immediate Future Will Be—Types of Organizations—Fundamentals of Co-operation.

IT IS a pleasure to meet today with this group of Georgia and Florida pecan growers. It is the purpose of the Department of Agriculture, emphasized and insisted upon by the Secretary himself, to be of service in such ways and at such times as will truly promote the best interests of agricultural producers everywhere. This policy has been consistently carried out for many years and as a result of it whenever a group of producers of sufficient importance and seriousness of purpose has asked assistance, the Department, within the limits of its appropriations and personnel, has given such aid. As a great arm of the Government it views all of the people engaged in lawful, useful pursuits in the same light. It does not take sides in controversies. It aims to avoid completely personal criticism, or any statement of attitudes antagonistic to the proper interests of any section of the country or group of the population.

A CRITICAL PERIOD IN AGRICULTURE

For nearly three years agriculture has been enduring a period of crisis. During these years many farm crops have at one time or another been selling at less than the cost of production. It is not so much that prices of agricultural products themselves are or have been low. Compared with pre-war times, in many cases, the prices are relatively high and if other conditions were satisfactory there would be no complaint as to prices. Unfortunately, the prices of everything the farmer has to buy, or practically everything, continue from a few per cent above pre-war normals, while the value of all of his products has gone back practically to normal, or only slightly above normal.

At the moment, the most serious situation confronting the country relates to the wheat grower, and this applies particularly to the wheat grower of the Middle Northwest, the Dakotas, and Montana, with parts of the neighboring states. Not only is the price of their product low compared with prices of labor and the things they must buy, but they have suffered from low yields and poor quality of crop; thus being thrice smitten, we might say, rather than thrice blessed.

In the state of Georgia you are in a better position, largely by reason of the fact that in spite of your being in the midst of the harvesting of the cotton crop, prices are well sustained in the world market. Cotton, corn, hay and forage are the three greatest crops of the state of Georgia. Cotton is bringing good prices; corn is bringing an unusually good price on the whole; while hay and forage, marketed in the form of livestock, are also bringing good prices.

GEORGIA'S POSITION AS AN AGRICULTURAL STATE

The last census showed Georgia to rank ninth among the 48 states in the total value



CHARLES J. BRAND, Washington, D. C.
Consulting Specialist in Marketing,
U. S. Department of Agriculture

of all farm crops, only Texas, Iowa, Illinois, Ohio, California, Kansas, Missouri and Oklahoma outranking her. The total value of Georgia crops was over \$540,000,000 compared with about \$210,000,000 in 1919. There has been some recession since 1919, but it is safe to say that the farm crops of Georgia at the close of 1923 will have shown a value of nearly half a billion dollars.

With all, you have had your griefs as have other sections of the country. The boll weevil now covers the whole cotton belt and no state suffers more keenly from its ravages than yours. Better methods of cultivation and control, the use of insecticides, the gradual stabilizing of weevil damage due to the natural control of its own insect enemies, have left you a notable cotton growing industry in spite of the setback. A series of short crops has resulted in the cleaning up of old surpluses in spite of the diminished European consumption. Hence, prices for cotton are more encouraging, though as usual we are human enough to wish them still higher.

The price of corn has advanced steadily in the great central markets until it is about 26 cents per bushel over the level that prevailed a year ago. In spite of the United States sending 48,608,000 hogs to market in the past fiscal year, the price at no time became so low as to result in a serious complaint. The beef market, on the other hand, has actually advanced so that prime qualities of beef steers are selling on the hoof at about 12c per pound in the great central stockyards markets.

Georgia has also benefited by the good prices that have prevailed in the perishable market during the present season. Her

fruit and vegetable crops have returned handsome prices to their growers when compared with the past two or three years, and in comparison with many other products.

GEORGIA AND THE PECAN INDUSTRY

It is now about 20 years since the establishment of a pecan industry based on budded and grafted stock got under way in the state of Georgia. In 1899 the whole state produced only slightly over 27,000 pounds of pecans of all kinds. Ten years later, the crop was 354,000 pounds or 1200% of 1899. In 1919 it had increased to 2,544,000 pounds or 618% of 1909. There will be a continued rapid increase in the future, though naturally the percentage rate will diminish. This means that gradually you are approaching the point where you must confront a marketing of the first magnitude.

In 1910 less than 4,000 Georgia farms were reported as growing pecan trees. In 1920 almost 19,000 Georgia farms reported pecans. In 1910 there were 75,000 bearing trees. In 1920 there were nearly 445,000 bearing trees.

In 1909 you marketed 354,000 pounds of nuts, and in 1919, 2,544,000 pounds. In 1899 the total crop of the whole United States was only 3,206,000 pounds, or 700,000 pounds more than the Georgia crop in the last census year.

In the year 1923, I understand that you are expecting the largest crop in your history, which will no doubt mean that the Georgia crop will be greater than the whole crop of the United States was, say fifteen years ago.

PARTIAL STATISTICAL VIEW OF PECAN INDUSTRY

We can always reason better about an important problem if we have laid a broad foundation upon which to base our thinking. It is idle to consider Georgia alone in the pecan marketing problems. Ninety-eight per cent of the pecan trees of the United States are growing south of the line formed by the northern boundaries of North Carolina, Tennessee, Missouri and Oklahoma.

In 1920, 102,000 farms in the United States reported the growth of some pecan trees, whereas in the census of ten years previous, there were 37,549 reported. These figures, of course, include both wild and improved trees.

In 1920 there were a total of 4,929,479 pecan trees reported to the census. Of these, 2,672,000 were bearing and 2,257,000 were non-bearing. Of these totals in 1920

BEARING TREES	NON-BEARING TREES
1,045,694 in Texas	654,281 in Georgia
444,222 in Georgia	449,464 in Texas
400,480 in Okla.	257,671 in Alabama
176,426 in Alabama	254,187 in Miss.
129,971 in Miss.	208,613 in Florida
113,547 in Florida	108,650 in Okla.

2,310,340

1,932,866

It is apparent from these figures that the six states named are the great pecan states. Others worthy of mention are Louisiana, Missouri, South Carolina, Kansas, and Illinois, but this group, with the possible exception of Louisiana, is of minor importance. It is apparent from the foregoing figures that of the bearing trees in 1920, practically one-fifth were in the state of Georgia, but of the non-bearing trees considerably over one-third are in the state of Georgia. This means that as the non-bearing trees come into bearing, the marketing problem in your state will grow more and more acute. Are

you preparing wisely for the inevitable crisis that your industry must confront?

It may convey the picture to you with some additional force to say that in 1909 the total crop of the United States was 9,890,000 pounds with a value of \$971,000 while in 1919 the crop was 31,808,000 pounds with a value of \$7,792,000. This means an increase of three and a half times in quantity, and of more than eight times in value. In 1919, it must be remembered, was a year of extraordinarily high prices for all food stuffs and that for an average period of years such high relative values would not be consistent.

In the state of Georgia in 1909 the total crop, as stated before, was 354,000 pounds with a value of only \$47,800, while in 1919 it was 2,544,000 with a value of \$890,535. In other words, the value of the Georgia crop in 1919 was almost as great as the value of the whole crop of the United States ten years before.

The following table summarizes the situation for the six leading states:

	No. of bearing trees	Production in lbs.	Value in dollars
Texas	1,045,694	16,755,421	\$3,686,191
Georgia	444,722	2,544,377	890,535
Oklahoma ..	400,480	4,296,642	859,331
Alabama ...	176,426	1,179,735	353,924
Mississippi .	129,971	1,559,245	289,923
Florida	113,547	1,025,673	307,705

The average price of nuts in 1919 was about 24½ cents. In 1909 it was 9 8/10 cents.

WHAT IS CO-OPERATION?

No subject is more discussed at present than co-operation, particularly in the marketing of agricultural products. Nevertheless, there is a great deal of misunderstanding as to what co-operation really is and how it functions. Co-operation is merely a way of doing business. Instead of selling products for distribution to private enterprises who buy them outright, or who may on occasion handle them on commission for the grower, a group of growers gets together and employs its own help for the disposal of its products. We are so accustomed in America to the great middleman system that it is a little difficult sometimes to think clearly about co-operation. Hence, I say it is merely a way of doing business. In certain European countries it is as much the way as the middleman system is with us. For instance, if an American agricultural machinery manufacturer wished to sell his machinery in Germany, he would not find scattered throughout the German Republic middlemen dealing in harvesters, mowers, plows, etc., for the simple reason that not only machinery but fertilizer, feeds, and practically all other large farm needs in Germany are purchased through the co-operative organizations that cover the whole country. The individually owned coal yard, wood yard, feed store, implement business, etc., are as rare there as the co-operative organizations have been in some sections of the United States throughout our history.

Being merely a way of doing business, co-operation must make its way on its merits. First of all it must produce economic results that cannot be attained in any other way. Necessarily it has important by-products in the way of awakening interest in the conduct of business, a knowledge of what is involved in the marketing and distributing of crops, and it creates a keener appreciation of the problems of rural communities by reason of the participation of each individual in its operation.

EXTENT AND IMPORTANCE

I am taking up a number of things which are not necessarily of instant application to pecan marketing, but a proper treatment of any one of the agricultural products involves a general understanding of the whole fabric of co-operation. For the first time in the history of the United States the census of 1919, by the request of the Department of Agriculture, obtained definite figures on co-operation in the United States. This canvass revealed that 624,527 farms participated in the co-operative marketing of some part or all of their products. As there were on the census data 6,448,000 farms, it is evident that practically 10 per cent of the farms of the United States have a vital interest in co-operation. In the census year, \$725,000,000 worth of crops were sold co-operatively. Based on this figure and having in mind the extraordinary de-

velopment of the past four years, particularly in the co-operative handling of cotton, tobacco, wheat, and certain other crops, it is probably safe to say that even with the reduced prices of agricultural products a million and a quarter dollars' worth of products will be handled by co-operative organizations in 1923. In order to show you the geographical location of co-operation, I will give the leading states in the order of value of their products marketed co-operatively:

Calif. ...	\$127,990,981	Neb.	\$ 44,755,140
Minn. ...	82,760,455	Kansas .	44,290,957
Iowa ...	59,403,626	S. Dak. .	31,651,244
Illinois .	47,920,487	Wis.	28,884,215
N. York .	44,906,247		

It is significant that the states named are among the most prosperous agriculturally in the whole country. The group of nine includes six of the twelve leading states in the value of all farm crops. While California leads in total value, Minnesota stands first in the percentage of the total number of farms participating in co-operative marketing; 43.9 per cent of the Minnesota farms market some or all of their products through co-operative associations. South Dakota is next with 27.1 per cent. California, which is first in value, is fifth in the percentage of participation with 21.9 per cent of the total number of farms participating. In the census year the showing of the state of Georgia was not satisfactory with regard to the use of the co-operative method of doing business. Only 586 farms reported purchases or sales co-operatively, and of the total number reporting, 210 participated in sales co-operation—only .1 of 1 per cent of all of the more than 300,000 farms in the state of Georgia. The value of the products sold co-operatively was \$890,605. I am glad to say that the past four years will show a great change in this situation with reference to your state. Your fruit and vegetable growers, cotton growers, and many other producers have now undertaken co-operation, so that if progress continues normally, the next census will undoubtedly put Georgia far up in the ranks of co-operation and I believe it will not be too much to expect that the pecan growers alone, whether they operate in a single organization or in two co-operative organizations, will market as large a value of products co-operatively as did the whole state of Georgia in 1919.

TYPES OF ORGANIZATIONS

In order that you may have at least a crude picture of the co-operative system, I wish to outline most briefly the three types of co-operative enterprises most frequently met with.

1. The independent farmers' marketing unit, such as the individual farmers' elevator or at the local shipping station, the fruit shipping association, which confines its membership to a single locality or practically so, and the individual unit of farmer's nut warehouse. Numerically, this is by far the most important group of co-operatives.

2. The federated organization which is made up of individual units confined largely to single localities like those outlined in No. 1 but unified into a central or federated agency which either directly, or through an employed marketing agency, disposes of the products of the local association's members.

3. The large central association which executes directly with individual growers a marketing contract covering a period of from one to five years, through the operation of which the farmers' products, when harvested and delivered for marketing, come under the absolute control and direction of the central body. This type of organization may or may not have local branches, but when they exist, they are usually of a more informal character without authority to direct or control the marketing of products of their own members.

Of the federated organizations described under paragraph 2, the most outstanding example is the California Fruit Growers Exchange, which handles roughly 70 per cent of the citrus fruits of California, reaching a value of about sixty millions in a single year. This is the type of federated co-operation that has had the longest test in America.

The type of organization described in paragraph 3 is of more recent origin and is best illustrated by the cotton and tobacco growers' association and exchanges that

have been organized during the past three years in Oklahoma, Texas, Georgia, the Carolinas, Kentucky and other states.

FUNDAMENTALS OF CO-OPERATION

There are certain fundamentals that must be observed in all co-operative organizations if they are to be successful in the highest degree. First, they should center themselves whether upon a single crop or upon a group of closely related crops. In other words, organize a cotton association to handle cotton; a pecan association to handle pecans. Do not attempt to tie up with the special activities of a marketing association a confusion of products handled by different enterprises in the markets and requiring a totally different type of salesmanship and training for successful handling. Live stock is distributed through a series of channels totally foreign to grains. An apple association can handle peaches, pears and berries, and vegetables because they are sold through the same grade agencies in the same consuming centers.

The second fundamental principle is that the local unit should be completely, perfectly, and strongly organized and should be the foundation stone of the marketing structure to be raised above it. The reasons for emphasizing this point are that only in this way each individual grower can be brought into intimate participation in the many business activities that are involved in the distribution of their products. If the local association is not a genuinely functioning body, it is not long before the grower loses sight of the fact that he is a part of a co-operative enterprise. He can see little difference between a distant co-operative sales agency and a private sales agency operated for individual profit. On the other hand, if his local organization handles an important part of the business and he is present at its frequent and regular meetings, or on its board of directors, he is soon educated to the extent and complexity of the marketing problem and forthwith becomes a more valuable member of the community. I do not wish by this to be misunderstood. Some successful organizations are conducted on the basis of a direct relationship between the individual grower and the distant central exchange with a relatively weak connection with any local organization.

I would liken the benefits of co-operation on the basis of the federated agency, based on strong locals and the centralized agency with direct connection with a distant selling agency, somewhat to the game of baseball. The local associations in the federated body are the individual members of the team.

In the type of organization described in 3 above, generally called the centralized type of organization, the growers are to some extent, at least, merely interested spectators. They are taking in the game, rooting, cheering, but not actually participating beyond the point of turning over the product. There are advantages and disadvantages in each different type of co-operation. Some situations and some crops may call for one and some for another.

The third fundamental in the conduct of a co-operative organization is that it shall not speculate in the grower's crop. By the same token, it should not be so constituted to tempt its operating officers and employees to create speculative conditions by unduly withholding supplies or by dumping them. The owner of the product may, with propriety, assume speculative risks in his own behalf, but his agent, the co-operative marketing enterprise, treads on dangerous ground when it attempts to speculate for him.

[To be continued]

Co-operative Marketing Pays.

Twenty-six farmers' business organizations handling boxed apples sold more than 6,000,000 boxes of apples of the 1922 crop, valued at approximately \$8,000,000, says the United States Department of Agriculture. Sixteen of the associations advertise their products, the advertising assessments ranging from one-half cent a box to 4 cents a box.

Some of the larger appropriations for advertising the 1923 crop are \$35,000, \$30,000, \$22,700 and \$7,200. In the last 10 years more than \$750,000 has been spent to advertise one well-known brand of apples alone.

Pooling seems to be another of the secrets of success of the apple co-operatives, the department says

BEST LEGUMES FOR PECAN GROVES SUMMER AND WINTER

By B. W. Stone, Thomasville, Ga., Before the National Pecan Growers Association

LEGUME crops produce the most ideal condition of the soil for pecan groves. Pecan growers and others interested in nut culture flock to the groves bearing extraordinary crops, and almost invariably find that the owner has successfully grown leguminous crops.

It behooves the pecan grower to make a thorough study and a thorough test of legumes best adapted to his section and conditions. Deep legumes convert inert plant food into available plant food. Legumes gather two-thirds of their nitrogen from the air and one-third from the soil. Non-leguminous plants gather all their nitrogen from the soil, and in decomposition a large per cent is lost in the air and by leaching. For a young grove field peas, all things considered, are best. Runner peanuts intensively fertilized and cultivated give most excellent results. Georgia velvet beans and lespedeza are the next best in order named. To plant a grove and plan to plant nothing but runner peanuts for the first 25 years is a most excellent schedule for a pecan grove. In applying fertilizers for summer legumes I scatter one-third around the trees and the balance two-thirds in the drill over the whole grove; using 300 to 600 pounds and even one thousand pounds of 10-0-4 will be utilized to advantage by the trees and crop.

One of the very best plans for making use of summer legumes is to turn the land in December; this incorporates all of the vegetable growth. Leave it undisturbed until February. This allows the vegetable matter to become thoroughly decomposed. Apply fertilizer broadcast, harrow in, and harrow about every three weeks until about June 1st. This harrowing enables moisture to be retained and keeps down vegetation. Then plant broadcast two bushels of velvet beans per acre; Georgia 90 day Preferred and call it laid by. Beggar weeds can be planted at the same time as the velvet bean if preferred.

When the trees begin to bear, the field peas, on account of green stink bugs which produce the kernel spot, have to be discontinued. This applies also to soy beans, mung beans, etc.

A summer legume crop planned and properly carried out will produce all of the vegetable matter that is necessary for a pecan grove. The same can be said of a winter legume.

In a limited way, it is possible to grow both a summer and a winter legume in the same orchard. On account of adverse seasons, not permitting of proper preparation, the one-legume plan will give best results.

The summer legumes—peas, beans, etc.—do not need artificial inoculation, but are beneficial by an application of lime every third year. Nitrates formed by legumes are available as plant food by trees in three to four weeks in seasonable weather; and three to four months in dry or unseasonable weather. The above condition places summer legumes so a smaller per cent of the nitrates are used by the trees, and a greater waste by air and seepage. Still the growth will be sufficient for the needs of the tree.

WINTER LEGUMES

The immense size of the trees in many orchards and the demand for moisture and plant food at the same time for both tree and legume crops, has caused the winter-legume to demand attention from the

thoughtful orchardist. At present the winter leading legumes are bur clover, yellow melilotus and vetch.

Last winter I saw successfully growing the three above legumes without artificial inoculation; bur clover ten to fourteen inches high, yellow melilotus two to three feet high, and vetch in its winding way, stems four to eight feet long. Bur clover died down May 15th and vetch and yellow melilotus ten days later. It is an advantage in a dry spring to have legume growth cease as early as possible; but on the other hand, vetch and melilotus will give a greater amount of humus. The safest and most economical way to get the winter legumes growing successfully is to plant a small area and inoculate it artificially and afterward use the inoculated soil from said area for your other plantings.

Quite often growers experience considerable difficulty in getting successful stands of winter legumes, and most invariably the main cause is failing to plant on firm seed beds. Also very dry weather will prevent successful inoculation for best results. In talking with the pecan grower who had been successfully growing bur clover for several years he explained that he had made a failure with it three years until he learned how to plant it. His successful plan was to use a firm seed bed and to plant one bushel of rye to the acre. The rye furnished a moving shade for the tender plants of bur clover during the very hot days in the fall. Other winter crops are planted the same way. As to time of planting, I would say from September 15th to December 15th. Earlier plantings are damaged by the hot sun and plantings later than December 15th experience too much cold weather in getting started, and for nitrification. Don't hesitate to plant in December, for most excellent growths quite often are obtained by planting that late.

How to manage the growth of the above cover crops might be asked. The most successful tool I have ever used or have seen used, is a double acting cut-away harrow. Harrow the field one way and then cross harrowing is to be done when there is moisture in the ground. Great advantage is often had by waiting between the harrowing a few days to allow the growth to wilt. I have had beggar weeds and pea fields which strong men with two horse plows could not manage; still after double harrowing, could be plowed by boys with all ease.

Broadcast leguminous crops in a grove allow for spraying at any time. The spraying will not interfere with stock grazing in the field, but should you want to make hay, it is best not to cut the growth with most poison on it even after a good rain. For the crop becomes concentrated in curing for hay, but the poison does not become concentrated.

The successful pecan growers of the future are the ones who will study and make a practical use of legume, the great nitrogen gatherer from the air as well as from the soil.

J. M. Patterson—I am inclined to favor both summer and winter legumes. Georgia soil is destitute of humus, due to many years of raising cotton and removing from the soil all vegetable matter. I have a friend in the North who has planted his orchard three or four times a year with alfalfa and turned it in with a disc harrow.

This orchard is not plowed. It bears five and six times as many apples as does an orchard nearby which does not have this treatment and which is plowed. The crying need of the pecan orchards in Georgia is vegetable matter. It is a serious question whether the plow ought to be put into a pecan grove which has reached the bearing age. I plan not to plow except to get rid of Bermuda grass or of infection. I shall try the disc instead of the plow."

A. C. Snedeker—"This is a vital subject. I take nothing from my orchard after trees are 8 years old. Oats and rye give the humus."

SWEET ACORN

Acorn-eating Once Common

The nut of the oak, a principal foodstuff of the Indians, is not now eaten by white men, although, properly prepared, it is not disagreeable, as boys who have sampled it know well. Our forefathers fed their hogs on mast, which consisted chiefly of acorns. Dr. C. Hart Merriam, in "The National Geographic Magazine," Washington, gives the following interesting facts respecting the use of the acorn as a food by aboriginal Americans. There are in the United States, he says, more than fifty species of oaks, of which thirty occur in the Eastern states and about fifteen in the single state of California. He goes on:

When it is remembered that the Indian population of California at the time of its discovery numbered probably not less than 300,000 persons, and that from the Oregon boundary to the Mexican line, except in the desert region, where oaks do not grow, acorns were universally eaten, and in most cases were the principal article of diet, some idea may be had of the vast quantity and high food value of those annually consumed.

In the fall, when the acorns are ripe, the Indians gather them and spread them out to dry in the sun, and when thoroughly dried, store them in large baskets and wickerwork caches, sometimes hung in trees, but usually on rocks or poles. In Western Tehama county the acorns were buried in boggy places near cold springs, where they became swollen and softened and turned nearly black, but remained fresh for years. When needed, they were dug out and roasted, never dried or pounded for flour, the mush and bread being always made of dried acorns.

White men, in plowing, have opened up caches of acorns that had lain in these cold, boggy places for fully thirty years, and found the acorns black, but still good.

When preserved dry in the usual way, the acorns are shucked as needed, and the dry meats, each splitting naturally in two parts, are pounded in stone mortars until reduced to a fine meal or flour. This, at first, is disagreeably bitter, but the bitter element is removed by leaching with warm water. The meal is then dried and stored.

The Indians of Round Valley, California, sometimes practice another method of getting rid of the bitter element, namely, by burying the acorns with grass, ashes and charcoal in a sandy place and afterward cooking them in water from time to time until they become sweet.

Just mention AMERICAN NUT JOURNAL

ORIGINATOR OF THE HALBERT PECAN RECOUNTS ITS VIRTUES

Editor American Nut Journal:

After reading Sam James' article on the virtues of a perfect pecan it aroused the following lines of thought which I am sending you for the benefit of the readers of your splendid Journal.

The first mention of the seven virtues of a perfect pecan laid down by Mr. James is not an inherent virtue, but it depends upon either soil or climatic conditions or both. Any variety of pecan is healthy where nature originated it. Take Mr. Jones' best pecan, Money-maker, and he admits that it would not be healthy in the dry climate of West Texas. Then take the Halbert, a leading Texas variety, and it does not prove to be healthy in a very wet climate. By the way, these two varieties are very much alike in appearance, size and tree habits. I would again subdivide the virtues of a perfect pecan into tree habits and qualities of the nut. The tree should have the inherent habits of precociousness, prolificness and a regular bearer. Now a variety might have the first two virtues and not the latter, on account of blooming too early or maturing too late, so as to be caught by an early or a late frost, some seasons. This latter virtue is most important to produce the nuts every year without fail and the Halbert variety possesses this quality, above all, as I will show further on.

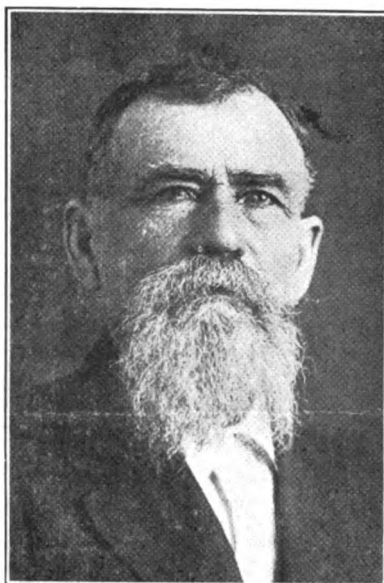
Now four of Mr. James' virtues pertain to the nut. His first one I would discard, flavor, as of no importance. It pertains to the individual who eats the nut and is a mere matter of taste and the Latin verb says "De gustibus non est disputandum," (we should not dispute about taste). In its place I would add the most important virtue of any pecan, the per cent of kernel to pound of nuts. It is for the kernel that we buy the pecan. Years ago I contended almost alone for this cardinal virtue, but I am glad to say that many have come to my assistance. Thinness of shell is the second most important virtue in a nut, for two reasons. It is easier to crack and extract and the thinner the shell, the less its weight on an individual nut and leaves more weight to the kernel. To illustrate, take two varieties, each takes 60 nuts to weigh one pound, but one has a thick shell and the other is thin and if the corky division is the same, the nuts with the thinnest shell will yield the most kernel. The third and last inherent virtue I would give a perfect nut is size. This virtue is valuable also for two reasons. The first is other things being equal, you have less work by having less pecans to crack and extract, in a pound. The second reason is that size adds to the per cent of kernel, other things being equal. To illustrate, take any given variety of nuts, as the Halbert, and pick 50 of the largest that will weigh a pound and then pick 80 of the smallest that will weigh a pound, and the shells and corky divisions of the 50 nuts will weigh less than the same on the 80 nuts, and the difference will go to the weight of kernels in the large nuts.

Mr. James says that "There is a great deal too much stress put upon a paper shell" and that "paper shells all get rancid very quickly and have other grave defects."

To my mind too much importance cannot be attached to the thinness of the shell. The very fact stated above that it adds to weight of the kernel and is easier to crack and extract are sufficient reasons. He is badly off when he says that all paper shells get

rancid quickly. He overlooks two important factors when he makes this broad assertion, viz., the composition of the kernel and the porosity of the shell. Some nuts have a much larger constituent of sugar in their kernels while others have much more oil. It is the oil that turns rancid when exposed to the air, while the sugar will preserve the kernel much longer, other things being equal. Again a thick porous shell will admit the air more freely than a compact thin shell. The Halbert pecan has the highest record of any pecan in the world on thinness of shell won in the world contest in the fall of 1921 at the Texas A. & M. College over an entry of 30 varieties which were Schley, Frotscher, Success, Delmas and Stuart.

And the Halbert does not get "rancid quickly," I have kept them for two years in my office with no protection except the shell, and the large per cent of sugar in the composition of the kernel not only pre-



H. A. HALBERT, Coleman, Tex.

vents their rancidity, but gives them their fine flavor and causes them to be easily digested by the most delicate stomach. After the two years they were not too rancid to be palatable, and while the shell is the thinnest it is compact and impervious to the air. Now I opine the other grave defects of a paper shell exist only in Mr. James' imagination. He does not mention them.

Above I spoke of the regularity of bearing as an important virtue of the tree. No tree has a better record than the Halbert along this score. The mother tree and about 750 budded progeny have now a full crop that will begin to ripen in 30 days, the 37th consecutive crop since I have owned the tree. Two crops were destroyed by hail in 1912 and 1920. It is practically frost proof. That is, no frost has come so late in the spring to prevent the tree from setting a crop of nuts, and no early frost in the fall ever comes before the nuts mature which is about the last week in September. On the night of April 8th, both in 1909 and 1914, and again on April 4th, 1920 there came a killing frost that destroyed the pecan crop over Texas, yet the Halbert trees bore good crops of nuts not only in my orchard but in orchards in other parts of the state. I do not mean to say that a frost cannot come so late in spring that it will not kill the pecans on the Halbert trees, but do say that none has occurred the last 37 years. The following rhyme sets forth the merits of this pecan.

Halbert pecans will never fail,
Unless destroyed by pelting hail.
No drouth nor late nor early frost
Will cause a crop to be totally lost.
So great the yield the trees can spare
Much fruit to worms and leave a share.
The nuts, not largest Jumbo size,
But sixty best will pound comprise.
So thin the shell, you readily tell,
They are the truest paper-shell.
The nuts so sweet and full of meat,
That most complete, are others beat.
Now don't be small and eat them all;
Let future folks "rise up and call
You blessed," and thank with a grateful
heart

For planting them the smallest part.
Not only will these nuts come true
And bear the best of food for you
If care is taken, in years a few
But generations continue to do.

I am not alone in extolling the merits of the Halbert pecan. Prof. J. A. Evans, the most scientific pecan grower in Texas, read a very able paper before the Texas Pecan Association at its recent meeting at Brownwood, in which he placed the Halbert at the head of the list of all Texas varieties and the Schley at the head of the Coast varieties. Besides the above high commendation the Halbert has the following to its record. Prize at Waco, in 1901 in a contest open to the world. Since then before the Texas Association, premiums on thinnest shell, fullest kernel and the best commercial pecan. At Mobile in 1911 it won the highest score of all entries at the meeting of the National Pecan Association. Then at the contest open to the world held at the A. & M. College in 1921, spoken of above, the Halbert came out next best to Schley raised in Florida and ahead of the same variety raised in Texas. The Florida Schley beat the Halbert only on the scores pertaining to size. Forty-nine Schleys were pitted against sixty-six Halberts in a pound. 19 nuts less, and, of course, it scored higher on size and as a natural consequence scored higher on per cent of kernel than the Halbert according to the rule mentioned above, but the Halbert scored higher than the Schley on the four other important points. Hence I conclude could the Halbert have been raised on the richer alluvial soil of Florida with the greater amount of rainfall than in West Texas, the Halbert would have more than overcome the two and a fraction points the Florida Schley beat the Halbert, but I further conclude that the opportunity awaits some enterprising pecan grower to originate the most perfect pecan yet known by planting the nuts of the Halbert variety in the wet climate and rich soil of Louisiana or Florida or even East Texas or any other southern state and wait a few years until they come in bearing. Nature adapts every thing to its environment between infancy and maturity so a Halbert grown from the nut will become immune against the diseases that attack the buds and young trees when transferred from a dry to a wet climate. Now listen to a chorus of voices shouting, "That is nonsense. No pecan will come true from the nut." I may have something to say on this point in a subsequent article. Anyway you are bound to admit that a nut from an isolated orchard of the Halbert variety, though by accident, if you please, is more apt to produce a tree bearing the Halbert pecan than a nut is from some other variety. Even a tree with the habits of the mother tree and nuts approximately as good even as the Halbert pecan will be worth a little fortune if immune against the diseases in a wet climate.

Coleman, Tex. H. A. HALBERT.

STRAIGHTENING OUT AN IMPORTANT TEXAS RECORD

By A. W. Woodruff

A Short — Albeit Pious — Pilgrimage to the World's Biggest Pecan Tree

(Photos by the Author)

IN THE August number of the American Nut Journal appeared a paragraph regarding what was said to be the largest pecan tree thus far discovered. The item was credited to an exchange, and proceeded to relate that this big tree stood "near Lampasas, Texas," and was cared for with great solicitude by the devoted owner; sprayed regularly by the state horticulturist, etc., all of which was extremely interesting—but it didn't happen to be true. Old man "Exchange" has made many a publication blunder.

The tree referred to is undoubtedly the "Hollis Jumbo" tree, the fruit of which took first prize at the World's Fair in Chicago away back in 1892-93. It bears a large, medium thick shell pecan which averages about 48% meat content, year in and out. It was one of the first big pecans to get international recognition, and its principal reputation is founded upon the advertising it got from its appearance at the Chicago Fair. But in passing it might be noted that we have in San Saba county probably 500 pecan trees which bear nuts as large as the Hollis, and with a meat content from two to twenty-two per cent greater.

Giving credit where it is due, however, the Hollis is one of the best seed pecans the writer has ever seen. It is believed its germinating qualities will closely approximate 98%, and it produces a strong young tree which is a vigorous grower. One year when the parent tree produced 1065 pounds of pecans, these were sold at an average price of 75c per pound, and most of them went for seed, so the Hollis has abundantly justified its existence.

Now it is a shame to spoil a good story, but so far from this tree standing "near Lampasas," as a matter of fact it stands in San Saba county, Texas, about 26 miles, as the flivver flies, west of Lampasas. And so far from its being cared for in similar manner as a young mother would care for her first born, candor compels the truthful historian to say that it gets no care whatsoever. Mr. A. I. Fabis of the U. S. Entomological Bureau at Brownwood, did come over and spray the tree for scale last year, using the kerosene and soap solution, but he did this principally for an object lesson to show owners of pecan timber that big trees could be sprayed successfully, even though at considerable cost. The Hollis is a big tree, somewhere around five feet in diameter a couple of feet above ground, but it is not "The World's Biggest Pecan Tree."

For the purpose of setting at rest divers rumors of the big tree which have been floating around through newspaper circles during the past year, and for further personal reasons not unconnected with pleasure, the writer armed himself with tape line, a sixty foot trot line, a camera and a paper bag of luncheon, and headed an expedition that departed from San Saba on a sunny Sabbath morning, to-wit, September 22, 1923, bound for the lair of the grand-daddy of all pecan trees.

In order that this voyage of discovery might be carried on under the protection of the strong arm of the law, the sheriff of San Saba county was duly commissioned as the fighting force of the pioneers. For his own protection, the sheriff took his wife

along; she, in turn being accompanied by a lovely tourist from far Los Angeles and a charming matron resident of San Saba. The party was also accompanied by S. F. Clark, former county agent of San Saba county, who is now serving in similar capacity in Bell county.

The big tree stands near the bank of the Colorado river, in San Saba county, about twelve miles from the city of San Saba. After an uneventful voyage, marred only by a flat tire which caused the sheriff to lose some ten pounds of avoirdupois (it was a hot morning), the home of "Old Timer" was duly reached and the scientific (?) instruments were unpacked. Also it should be noted that the ladies of the party, doubtless in accord with the theory of Napoleon to the effect that an army travels on its—but you all know what Napoleon said—unpacked a most abundant and delicious luncheon which was given due attention at the proper time.

Probably no picture will ever be made that will adequately represent this forest monarch, rearing his hoary head more than 100 feet above ground level. Another effort will be made, some day, to get a better view of him (although in view of the fact that this tree has produced between 1400 and 1500 pounds of pecans in one crop, possibly the feminine gender would be more appropriate), and dwarfing surrounding trees that by themselves would be proclaimed giants. In reference to the latter it has been recently noted that a statement from Georgia refers to a "giant pecan tree" the diameter of which was given as four feet.

The only accurate measurements that could be taken were of the circumference, diameter and height to the first limb. The total height of the tree can only be estimated. One pecan expert who visited it last year stated that he would be willing to lay a moderate wager that the extreme top is at least 120 feet above ground.

Having at last arrived at the proper place in our veracious chronicle, here is the explanation regarding the hereinbefore mentioned trot line. To one end of this was tied an iron washer and this, after the line had been coiled shipshape fashion, was hurled upward and, after several perspiring attempts, over the first limb above the

ground. Before proceeding to this measure, the writer suggested to the sheriff that he "shin up" the trunk and straddle the limb and thus assist at first hand; it being admitted by all that his 250 pounds of avoirdupois would offer little resistance to such effort. It is painful to record that the suggestion was not received gratefully—in fact, it was repelled with most unparliamentary language not at all suited to the day.

But in the fullness of time the several measurements were accomplished and the results are here set down:

Height, (estimated) 120 feet; circumference, two feet above ground, 24 feet (about 7½ feet in diameter); diameter ten feet above ground, 6 feet; height to first limb, 41 feet. Largest measured crop produced, between 1400 and 1500 pounds; estimated age, between 800 and 1,000 years.

As Hamlet once remarked, it "must give us pause" when we stop to think that on the fateful day when Columbus set out on his celebrated voyage of discovery, this tree might well have been a slender sapling, and that perhaps it was a "youngster" of only 150 or 200 years when the Pilgrim Fathers—not forgetting the Pilgrim Mothers—did or did not set foot on Plymouth Rock. At any rate here the old tree stands to show for itself and let all who come guess to their hearts' content its probable age.

And what a wonderful story the old tree could tell if it could speak in a fashion comprehensible to human understanding. Perhaps it has been the trysting place of innumerable Indian maidens and their warrior lovers; perhaps the first pioneers of Texas camped beneath its spreading branches in the days when San Saba county was not, but all this part of Texas was included in the boundaries of the Bexar district—some 200 miles wide and 300 or 400 miles long—and only a small part of the state at that. There is room for endless speculation on the subject, but the tree does not tell. Rugged and silent it stands looking out over a landscape that has few superiors for natural beauty. How long will it stand? So far as outward appearance indicates, maybe for another thousand years.

But little idea of its size can be gained from the pictures. Right here, lest there might be some apprehension in regard to the pose of two of the figures in the group pic-



AT THE BIG TREE, NEAR SAN SABA, TEXAS

(Left to right) S. F. Clark, County Agent, Bell Co., Texas; Mrs. Edgar Neal, Special Newspaper Correspondent; Mrs. Drue Allen Phillips, Los Angeles, Cal.; Mrs. Mamie Callahan, San Saba, Tex.; Sheriff E. T. Neal, San Saba Co., Tex.

PECAN STATISTICS—WHAT THE FUTURE HOLDS

By L. A. Niven, Horticultural Editor, The Progressive Farmer, Memphis, Tenn., Before National Pecan Growers Assn.

THE thoughts of all of us turn to nuts in the fall. They are not the nuts that live in bug houses either. Judging from the inquiries that come to our publication everyone, including father, is interested in the pecan. We have read, studied, talked, and written so much about pecans recently that we almost feel nutty, but seriously speaking is there any danger of too many pecan trees being planted? In the first place not more than one out of four pecan trees planted will come into profitable bearing. The reasons for this are that half of the trees die of neglect of one kind and another, and a large part of the trees now in bearing are seedlings or varieties of little commercial value. It has been said, and we have never heard it disputed, that if all the pecans produced in the United States were reserved for children under two years of age, the supply would not last one month. But I am getting away from my subject.

Pecan growers are naturally interested in knowing something about the extent of the industry, not only in the home state, but in other states. Many give considerable study to this phase of the industry, but others do not, and while the figures I give will not be new to most of you, yet I hope a review of them will prove of some interest.

From 1910 to 1920 the number of pecan trees in the 13 Southern states of Virginia, North and South Carolina, Georgia, Florida, Kentucky, Tennessee, Alabama, Mississippi, Arkansas, Louisiana, Oklahoma and Texas

ture of the party with the tree in the background, it may be offered in explanation that one of the ladies was taken with a choking spell caused, as she afterward said, by a large pecan from the big tree dropping into her mouth as she gazed upward in open-mouthed admiration. The sheriff, like a brave and gallant officer bent upon doing his duty at all hazards, was trying to arrest the offender upon its downward career just as the camera was snapped.

Regarded in cold type that doesn't look like a very convincing explanation, but your historian has no better one to offer. Perhaps the less said about some things the better.

Following measurements and luncheon—to which, by the way, full justice was done, the party re-marked in their sea-going flivvers and proceeded onward four miles to the town of Bend, San Saba county, in the edge of which village stands the famous Hollis tree. Another picture of the group was taken, with the Hollis tree as a background. Then a visit was paid to the pecan nursery of D. F. Moore, just across the river in Lampasas county, where Mr. Moore, like the good sportsman he is, "set 'em up" to the first pecans of the season. After visiting the splendid pecan orchard of W. J. Millican, near the town of Bend, the prow of the official flivver was turned toward San Saba, which place was reached after dark.

P. S.—Referring to purely personal matters: On the outward bound trip the writer traveled with Mr. Clark, but he left the party at Bend to proceed onward to Bell county, so on the homeward trip the two visiting ladies kindly offered to keep the scribe from falling out, thus contributing to "the end of a perfect day." Unlike the gentleman mentioned in Holy Writ, on the homeward voyage "the last state of this writer was better than the first." Selah!

crease of 1,797,592 trees, or over 70%.

The greatest percentage increase during this time took place in the state of Virginia. Of course the number of pecan trees in this state is comparatively small but that these folks appreciate the pecan is clearly evident by the fact that the number jumped from 3,205 in 1910 to 16,259 in 1920, giving an increase of 13,054 trees, or about 500%. North Carolina increased about 200%; South Carolina, approximately 200%; Georgia over 250%; Florida over 50%; Kentucky and Tennessee over 100%; Alabama over 150%; Mississippi over 85%; Arkansas over 70%; Louisiana over 25%; Oklahoma nearly 350%, and Texas lost a little more than 7,000 trees.

The figures quoted cover not only the



A. W. WOODRUFF, San Saba, Tex.
Secretary San Saba Pecan Co.

budded or grafted varieties but the seedlings as well. In this connection it is interesting to note that Texas made no progress during the past decade but that Oklahoma made very considerable progress, and in 1920 had a little more than one-third as many trees as the state of Texas. When we get closer to home, we notice that Georgia for instance increased from slightly above 400,000 in 1910 to over a million in 1920. Florida from a little more than 200,000 to nearly 325,000 trees; Alabama from 167,000 to 434,000 and Mississippi from 208,000 to 387,000 trees.

I believe I am safe in saying that a very

large percentage of the increase in trees during the past decade was of the budded or grafted varieties, with the possible exception of Oklahoma.

Eighty-four percent of all the pecan trees grown in Georgia are of the improved or budded varieties. Seventy-eight percent of Alabama's crop was the improved kind; and 75% for South Carolina, 64% for Florida, 25% for Mississippi and about 15% for Louisiana. Texas, with about half the pecan trees in the United States had less than 1% of the improved kinds.

I have compiled data showing the number of bearing trees, the number of non-bearing trees, and the production of pecans by counties for the 13 Southern states. I shall of course not burden you with all this mess of data now but will summarize these by states. I shall turn over to the Secretary these figures by counties, so that the information may be printed if desired.

BEARING AND NON-BEARING PECAN TREES AND YIELD BY STATES FOR 1920

	Trees not of Bearing	Trees of Bearing	Production (pounds)
	Age	Age	
Ala.	257,671	176,426	1,179,735
Ark.	27,523	19,907	364,342
Fla.	208,613	113,547	1,025,673
Ga.	654,422	444,834	2,544,688
La.	101,964	95,075	2,262,666
Miss.	255,468	132,212	1,592,177
Okla.	108,650	400,480	4,296,642
S. C.	90,025	58,025	525,783
Texas	451,433	1,050,678	16,803,543
N. C.	37,227	17,470	145,753
Ky.	2,257	7,591	50,352
Tenn.	7,002	4,127	74,715
Va.	3,897	12,452	33,927

Total for 13
Southern
States .. 2,206,152 2,532,824 30,949,996

If the increase in trees from 1920 to 1930 is the same percentage as the increase from 1910 to 1920, we will have in 1930 8,073,000 trees as compared to 4,748,000 in 1920. I believe it is safe to say that 1930 will find in the neighborhood of 10,000,000 pecan trees in the South.

To Make Most Beautiful Road

Ranger, Tex., Nov. 3—"Make the Bankhead highway between Ranger and Cisco the most beautiful road in the state."

Such was the suggestion of R. H. Bush, county agricultural agent, while in Ranger for a club talk, and he urged that the pecan tree be planted every 60 feet of the way as the chief step in that direction.

"I don't see why we shouldn't plant pecan trees on both sides of the highway to Cisco," he said. "It would be an attraction. No reason why the trees shouldn't grow on every foot of the road."

"It would be a beautiful road in five years. You'd have tourists talking about it the country over."

Select a date for the trees to be planted, ask the citizenship to do the planting and do it next month, Bush urged.

FROM 1910 TO 1920 INCREASE IN NUMBER OF PECAN TREES WAS AS FOLLOWS:

(Bearing and non-bearing)

Virginia	From 3,205 to 16,259	or an increase of 13,054 trees	or about 500%
N. Carolina....	From 27,657 to 54,697	or an increase of 27,040 trees	or about 200%
S. Carolina....	From 76,965 to 148,050	or an increase of 71,085 trees	or nearly 200%
Georgia	From 401,279 to 1,099,003	or an increase of 697,724 trees	or over 250%
Florida	From 212,819 to 322,130	or an increase of 109,311 trees	or over 50%
Kentucky	From 4,577 to 9,802	or an increase of 5,225 trees	or over 100%
Tennessee	From 5,346 to 11,129	or an increase of 5,783 trees	or over 100%
Alabama	From 167,417 to 434,104	or an increase of 266,687 trees	or over 150%
Mississippi ...	From 208,524 to 387,680	or an increase of 179,156 trees	or over 85%
Arkansas	From 27,769 to 47,730	or an increase of 19,961 trees	or over 70%
Louisiana	From 156,074 to 197,039	or an increase of 40,965 trees	or over 25%
Oklahoma	From 150,471 to 519,130	or an increase of 368,659 trees	or over 350%
Texas	From 1,509,169 to 1,502,111	or a decrease of 7,058 trees	

Total 2,951,272 to 4,748,864 or increase of 1,797,592 or over 70%

American Nut Journal

COVERING NUT CULTURE

NORTH—SOUTH—EAST—WEST

AMERICAN FRUITS PUBLISHING CO., INC.
59 State Street - Rochester, N. Y.

RALPH T. OLCOTT, Editor and Manager

Official Journal Northern Nut Growers' Assn

Official Journal Nat'l Pecan Growers' Assn

SUBSCRIPTION RATES

Three Years, in advance.....\$5.00
One Year, in advance.....\$2.00
Canada and Abroad.....2.50
Single Copy20

ADVERTISING RATE

Per column inch.....\$2.80
Forms Close 10th of each month

ROCHESTER, N. Y. NOV., 1923

NUT ASSOCIATIONS

California Almond Growers' Exchange—
President, G. W. Pierce; manager, T. C. Tucker, 311 California St., San Francisco.

California Walnut Growers' Association—
President, C. C. Teague; secretary, W. T. Webber; manager, C. Thorpe, 1745 East Seventh St., Los Angeles, Cal.

Alabama Pecan Growers Association—
President, C. Kirkpatrick, Selma, Ala.; secy-treas., Morgan Richards, Selma, Ala.

Georgia-Florida Pecan Growers Association—
President, A. C. Snedeker, Blackshear, Ga.; vice-pres., H. K. Miller; sec'y-treas., J. S. Wight, Cairo, Ga.

National Pecan Growers Association—
J. M. Patterson, Putney, Ga.; vice-pres., E. C. Butterfield, Winona, Tex., and Clifton Kirkpatrick, Selma, Ala.; secy., J. Lloyd Abbot, Spring Hill, Ala.; treas., J. Slater Wight, Cairo, Ga. 1924 meeting, Cuthbert, Ga., Oct. 1-3.

National Pecan Growers' Exchange—
President and manager, William P. Rullard, Albany, Ga.; vice-pres., J. B. Wight; Secy-treas., A. D. Galt.

Northern Nut Growers' Association—
President, Harry R. Weber, Cincinnati, O.; Vice-pres., J. F. Jones, Lancaster, Pa.; treas., H. J. Hilliard, Sound Beach, Conn.; secy., Dr. W. C. Deming, 983 Main St., Hartford, Conn. 1924 convention, New York City, Sept. 3-5.

Oklahoma Pecan Growers Association—
President, O. K. Darden, Ardmore; secy-treas., C. E. Ringer.

Oregon Walnut Association Co-operative
President, F. W. Meyer, Dundee, Ore.; Manager, W. H. Bentley, Dundee, Ore.

Southern Pecan Growers Association—
President, R. B. Small, Macon, Ga.; treas., P. J. Brown, Albany, Ga.; secy-manager, Harry U. Jackson, Baconton, Ga.

Southeast Georgia Pecan Association—
President, Dr. W. H. Born; vice-pres., Col. G. H. Harris; secy., J. H. Girardeau, McRae, Ga.; treas., E. F. McRae.

Texas Pecan Growers' Association—
President, H. G. Lucas, Brownwood; vice-pres., John P. Lee, San Angelo; Secretary, Oscar Gray, Waxahachie.

Western Nut Growers' Association—
President, Ferd Groner, Hillsboro, Ore.; secy-treas., C. E. Schuster, Corvallis, Ore.

Gratefully Acknowledged

"I just received in this mail my first issue of the American Nut Journal and I was so impressed with same, that I know I have been missing a great deal; however I hope to correct my error as far as possible. Herewith I am handing you my check for \$8.00 for which please credit me with subscription for this year 1923 and please send me the copies of the American Nut Journal for the past three years up to this year's issues, 1922, 1921, 1920."—R. R. RICE, VARNER, ARK.

"I've slipped up on renewing my subscription to the American Nut Journal. Please send it and bill. Can't do without it and didn't realize how essential it is if one is going to keep posted."—S. B. GARBUTT, WINCESTON, CAL.

HIGHLY VALUABLE INFORMATION

Every commercial pecan grower, present or prospective, will find in the address delivered by Charles J. Brand at a recent meeting of the Southern Pecan Growers Association at Albany, Ga., information of great practical value. The marketing of pecans to best advantage, not only at present but especially as time goes on, is much more than an incident in pecan culture and distribution. It is of vital importance if adequate returns for long-continued effort put forth are to be attained. Unity of action in putting the pecan crop on the market has been proved to be the solution of the problem.

Much has been written on the subject of co-operative marketing. Much of this matter has been a record of experience over a short period or in connection with certain phases only. Enough has been written to show that success in co-operative marketing can be attained only through widespread co-operation.

Growers naturally seek practical advice, based upon long and successful experience. Leaders in the pecan industry have made it possible for them to have just this. Two important events this fall in the heart of the propagated pecan district of the Southeastern states have placed full and reliable information before the growers. The first of these is the address by Mr. Brand in September; the other is the symposium by which the practical experience of the citrus growers of Florida was related at the convention of the National Pecan Growers Association early last month. These two events have provided a library of co-operative marketing information which every commercial pecan grower should file and preserve for much study and for easy reference.

Mr. Brand's address will appear in installments in three consecutive issues of the *American Nut Journal*, commencing with this issue. We suggest the advisability of preserving with special care the issues containing this address, and of filing them in connection with the official report of the 1923 convention of the National Pecan Growers Association containing the addresses of officers and members of the Florida citrus associations.

Mr. Brand is probably the highest authority on co-operative marketing in general. He is the consulting specialist on marketing of the U. S. Department of Agriculture. His experience dates back to the very beginning of co-operative marketing.

NOW IS THE TIME TO PREPARE

In a comparison of city and farm productivity in the last fifty years and a survey of the future, H. A. Wallace, editor of *Wallace's Farmer*, Des Moines, Iowa, shows how machinery has helped the farmer meet the increasing demand for food products. But, even so, he shows that thirty years from now there will be a greatly increased demand, in proportion to city and rural population. At present we have about thirty-two million people actually living on the land, and about seventy-seven million living in small towns and cities. The drift of things is such that it looks as though by 1950 we would have a population of 150,000,000 people. Indications are that of this number 35,000,000 (or 2,000,000 to 3,000,000 more than at the present time) will be living out on the land, while 115,000,000 (40,000,000 more than now) will be living in small towns and cities. This is no more radical than the change

in the last thirty years. Through improved methods, those on the land will probably be able to feed those living in the towns and cities, as they do now. But by 1950 only a small percentage of the people in the cities will have the remotest understanding of farm problems. The tendency will be for city people to concentrate their attention more and more on city problems, which will necessarily have grown tremendously in their complexity. Food prices will be so high as to cause the hungry city populations to bring food from other countries. There will be more than murmurings against the high cost of living.

From all of which it may be deduced that it is a good thing to locate on the land now and to plant great food producing machines—Nut Trees—in constantly increasing quantities. The food will be needed. It's one of the finest kinds of food, produced with the least effort.

PECAN TREES FOR HIGHWAYS

Georgia highway officials are interested in the discussion by several south Georgia daily newspapers relative to a proposal of the Moultrie Observer that pecan trees be planted along state roads.

"Pecan trees do not need to be cultivated after they have reached a certain age," the Observer says. "They get their support from low down in the earth—too deep to cultivate. Look about you anywhere and you will see trees doing well in places where they are not cultivated. Only young trees need to be cultivated."

The Observer argues that if its suggestion is carried out, the beauty of Georgia highways will be greatly increased in a practical and beneficial way.

At the Jacksonville convention of the National Pecan Growers Association, highway planting of pecan trees was declared to be inadvisable until such time as the public can be educated to care for the trees. But in our opinion the very way to educate the public in the care of pecan trees would be to encourage planting—anywhere, roadsides included—and let admonition and advice go hand in hand with the growth of the trees.

For Windbreaks and Timber

F. F. Moon in his production "The Book of Forestry," says:

"Twenty per cent of all agricultural land in the Middle West could be planted to wind breaks and the remaining 80% would produce as much as the total now. Experts figure that at least one-fifth of the land should be devoted to tree growth in any country, to prevent it from becoming a desert."

So I ask, this being granted, why not plant the most profitable sort of windbreaks? What is so valuable as black walnut as a tree; and I am told that they make good windbreaks.

In New York state, says Moon, 12,000,000 acres, or nearly 40% is forest land, and of this 2,500,000 to 3,000,000 acres requires reforestation. At 15 trees per acre, figuring on only nut groves, 1,000,000 acres will take 15,000,000 trees. For timber the black walnut should of course be set very much closer, say 10 by 10 or 12 by 12 feet. The former takes about 500 trees per acre.

H. R. MOSNAT.

If it relates to nut culture it should be in the AMERICAN NUT JOURNAL. Please send it in.

THE SLOW GROWING PINON TREE

As nut culture in the Northern states develops, there are indications that earliest success for nut enthusiasts may come through specializing on certain nuts. There are, fortunately, enthusiasts who are devoting expert attention to Northern nuts in general, like C. A. Reed, Willard G. Bixby, Dr. Robert T. Morris, Benjamin Buckman and Dr. W. C. Deming. Among the specialists are H. R. Mosnat, Morgan Park, Ill., in black walnut; A. C. Pomeroy, Lockport, N. Y., and C. R. Biederman, Hereford, Arizona; in English walnut; Conrad Vollertsen, Rochester, N. Y., in filbert; D. H. Hulsemann, Richard Turk and others in English walnut and George Dorris and others in filbert in the Pacific Northwest; Mrs. Fannie S. Spitz in pinon nut in New Mexico.

Mrs. Spitz, noting a suggestion some time ago in the *Journal* regarding the growing of pinon trees, sends us the following information which she obtained through the courtesy of the U. S. Department of Forestry:

The trees are very slow growing. The pinon tree when twenty years old attains an average height of two feet; when forty years old, about six and one-half feet; at this age and height the tree begins to bear nuts; when the tree is sixty years old, it averages a height of ten feet, and when two hundred years old about twenty-four feet in height. Its natural habitat is known to be the slopes of the mountains of New Mexico, Arizona, Lower California, and in the ranges of Northern Mexico at varying altitudes of from 5000 feet to 6500 feet. Also, the trees are sometimes distributed in sheltered canons of these mountain ranges. The seeds of the pinon trees form an important article of food. These trees in some sections form beautiful open forests above the sea-level as above mentioned. Some are distributed also along dry gravelly slopes and mesas (table lands) from the western base of the Wasatch Mountains of Utah, westward over the ranges of Nevada to the eastern slopes of the southern Sierra Nevada, and to the westward slope at the headwaters of King's River, and southward to Northern Arizona and to the mountains of Southern and Lower California.

It might be that under favorable conditions and in proper locations cultivated pinon trees would develop faster and bear earlier.

Mrs. Spitz intends to dispose of her pinon-shelling machines and the domestic and foreign patents pertaining thereto, and to retire from the business.

HOW GREAT THE NEED

The importance of educating the public in the matter of planting nut trees is clearly shown in this announcement which we clip from the Mt. Vernon, Ohio, *Republican-News*:

Japanese walnuts are very rare in this part of the country, and to have a tree of these nuts is considered a streak of "good luck." Mr. L. A. Culbertson, of the *Republican-News* happens to be one of the fortunate ones. He has a tree of this type and this year it bore its first big crop.

The nuts are delicious, and this crop consisted of several bushels. The covering of the nut is thin, and is easily taken off. Owing to the fact that the nut is very delicious and that the tree seems to be growing fine in this climate, Mr. Culbertson reported that he would bring a supply of the nuts to the office, and distribute them to as many farmers as might be interested in growing some of the trees.

It is evident that the *Republican-News* and its readers know little or nothing of what is being done to develop Northern nut culture. The "good luck" of Mr. Culbertson might have been shared contemporaneously by those farmers who are only just planting the seeds!

Why Pecan Trees Don't Bear

By Harvey C. Stiles

Probably some who read the *Journal* recall my discussions of this problem—the legitimate reasons for a pecan tree's failure to produce its rich, precious fruit regularly. In my work as consultant in pecans I seek ever to keep the tree in most perfect balanced health. But it must not be accepted that the tree in most perfect health is in most vigorous or rampant growth. We must keep it in the most perfect balance of health, as to growth, foliage, expansion, height, and in its functions looking to, or providing for regular and abundant fruitage (i. e. nuts).

And every nut grower faces, in time, the problem of why his trees do not produce as they seemingly ought to do, with seemingly perfect health, no lack of food elements, no acidity and no apparently adverse weather conditions. Yet, no crop.

In my own work this is the constant problem.

In more cases than any other, the reason lies at a door seldom realized, seldom given a thought. And this is the fore-shortening of the life of the leaves.

Sometimes this is from caterpillar or web worm; summer drought, hail, etc. But more often from the accumulated work of some type of foliage fungus, finally so far affecting the chlorophyll and the leaf's structure that it ceases to function before it has done its life's work. For it is only the leaves and their breathing and working that enables the tree to do its work. Or rather, the leaves do all the work of food manufacturing. And if they stop functioning even by Sept. 1, as in actual fact a very large per cent of them do some years more than others, then we have lost their labor and their harvest of food that must be gathered and stored in full measure, not alone for the maturing rich crop of nuts, but for the embryo pistillate-flower buds that must get also their reserve of rich baby-food in concentration in the fruit twigs and enfolding wrappings, or else these buds abort and give no fruit nuts.

The leaves should breathe and work at this till quite Nov. 1 in all the pecan world; and if it is stopped Sept. 1, then we have lost just 25 per cent of the working year, and the very time of final harvest, for feeding the embryo crop of next year. How, then, shall we expect full strength in them, for the natal time, in spring when they shoot out with their stored energy the long 6 or 8 inch spray that carries the pistillate flower and makes the flower also, all from this fall's storehouse?

It is then the autumn months, August, September and October that we must look most to for next year's crop. And in those months make surest of food and moisture for the roots that gather the food, and for health and freedom from clogging, searing fungus over the leaves that elaborate their food.

The notion that fungus destroys or holds in check the scale insects that infest some pecan trees, is too vague for practical consideration in pecan production problems.

If they do this at all, it is at the cost of fully 25% of the working power of the foliage. And this at the season of greatest need of the tree, in nourishing its current as well as its embryo coming crop, is the most potent reason for unsatisfactory production in nearly or all cases where moisture supply

is adequate, or defoliation at that season is not attributable to caterpillars, storm, etc., or destruction of buds by insects. And it is certainly not a fact that any or all of these latter causes explain a great majority of the failures of the pecan to produce after reasonable age. It is, then, largely the destruction of the foliage, before it has completed its work.

Darwin's Reference to Walnuts

Editor American Nut Journal:

Prof. L. H. Bailey in his book, "Evolution of Our Native Fruits," (1898), quotes Darwin's "Variation of Animals and Plants" i., 329; saying that Darwin's prophecy there had been largely fulfilled. It was this—"Had North America been civilized for as long a period, and as thickly peopled, as Asia or Europe, it is probable that the native vines, walnuts, mulberries, crabs and plums would have given rise, after a long course of cultivation, to a multitude of varieties, some extremely different from their parent-stocks."

With 800 varieties of American grapes at the time that book was written, 25 years ago, more than 200 American plums, 300 raspberries, and so on, a part of the forecast of the great English scientist has been made real, and even a quarter of a century ago.

But notice the order, vines, first; walnuts second, and it is certainly not without intention on the part of the writer, but although we now have about 1000 varieties of grapes, if not more, there are only half a dozen varieties of walnuts from our American stocks.

Darwin mentioned walnuts second because he must have considered the possibilities for their development second to the grapes, but we have not done much so far to improve that valuable heritage.

It is also interesting to note that Prof. Bailey does not encourage nut tree growing, but in spite of that we have had immense progress in that line in California and the Pacific Northwest and also in the South—English (Persian) walnuts and almonds mainly in the former, and pecans in the latter section.

My little nursery is now nicely tucked away with a mulch of leaves for a winter blanket. The soil needs plenty of leaf mould, in fact most any soil is benefitted by it. Some of my young trees grew nearly a foot this season, and were transplanted late, and conditions unfavorable, as it was very dry and cold, and lately too much moisture. The trees were flooded twice this summer, but that does not bother them, although it killed my peppers, beans, cucumbers, tomatoes, etc.

A man in California writes to ask about rooting walnuts from cuttings. This can be done with many plants, also some shrubs and a few trees, but not nut trees. Prof. Neilson made and directed extensive experiments in that line, but with no success. This work was done in a greenhouse where all conditions of temperature, moisture, etc., could be controlled. Every other known method was also used to get the right conditions if possible, but all to no avail.

Morgan Park, Ill. H. R. MOSNAT.

The Path of Prosperity

Down in Baldwin county there is a family who own a large and profitable pecan grove. They left comforts and luxuries in Chicago to come to Alabama and raise pecans. When people from Illinois see the future ahead of pecan growing here, we home folks don't want to sleep over our rights. Not far away from us, in southwest Georgia, is the largest papershell pecan grove in the world. Truly, the path of prosperity leads through pecan orchards.—Lafayette Ala. Sun.

The Georgia Crop Reporting Service, with headquarters in Atlanta, says under date of Nov. 10th: "The pecan crop this year is excellent, both as to quantity and quality, and very satisfactory prices are being received. The crop will go a long way toward relieving the financial situation in at least a dozen Georgia counties. The quality of the nuts is the highest on record."

Oklahoma Pecan Growers Association

In January 1921 the Oklahoma Pecan Growers Association was organized for the propagation of the standard named varieties of pecans on the native pecan growth that abounds in Oklahoma.

About a dozen of the persons that had been experimenting with the work decided to organize this association. Those most active were O. K. Darden, C. E. Ringer, Doc. Coffey, Mrs. Porter Staple, A. C. Holman, Irl Hudson, Eugene Berry, Doc Bostwick, Wilber Hedges and H. H. Brown. The organization has now 65 members, some of whom are from other counties.

Around Ardmore much pecan interest has been developed since Jan. 1, 1921. Beautiful little trees are growing on the Court House lawn, all standard pecans. The A. C. Holman project, 5 miles northeast of Ardmore, of 90 acres has about 1500 budded pecans, 2 and 3 years old. Erett Dunlap has several hundred budded trees; Eugene Berry has 100 trees southeast of city limits; D. C. Bostwick has probably 200 fine budded trees at his dairy farm; H. H. Brown has 500 or more on his farm west of Ardmore; J. B. Riddle, southeast of city limits has budded some during the past three years; J. B. Jones, south of city, has about 200 on his tract of 20 acres; Wilber Hedges has had budded about 150 trees; George Dyer and Chas. Wagner have 12-acre tract on Caddo Creek just north of city, that was all timbered and was cut close to ground last spring; sprouts from the stumps were budded this fall. Wilson Newman purchased ~~more of~~ cut-over land an east side of ~~the~~ road just north of Caddo bridge, ~~and~~ the young pecan growth on this land ~~was~~ budded to the standard variety, the ~~one~~ of 1922; it is a tract to be proud of.

A state demonstration project was started Nov. 1, 1921 by Luke and Ringer, when they purchased a 40-acre tract that had been cut over several years ago. The young growth kept sprouting up each year, despite the fact that each year the growth was cut down. This tract was cleaned up and the little pecan sprouts prepared for budding, which was done during August 1922, eight of the standard varieties being used on this project; to say the least, the owners are proud of this tract.

Our Association has been responsible for considerable development outside of Carter county. Around Okemah in Ofuskee county, more than 1000 trees were budded during August this year.

The largest project that has been attempted in Oklahoma is that of Walter Colbert and D. C. Kennedy of Pauls Valley, who had budded during September this year, 2500 native trees of different sizes. O. K. Darden had charge of the 2500 tree budding. Mr. Darden has had several contracts this year, in other counties of the state.

Just take an inventory of what has been done along this one industry in less than three years. Now what could we do if every owner of lands that has the pecan native growth would have at least a part of this growth budded to the paper shell pecan? Carter county would have an industry far ahead of any she has at the present time. It would be well if every such owner would make a thorough investigation of this matter. He will find that the above is true. A trip through Georgia, Florida, Alabama, Mississippi and Texas will convert the doubter. Why delay the work? A year is a great loss of time in the growth of a tree.

Our Association invites all to make in-species of the different tracts above mentioned, and if impressed with the work, we ask co-operation for more extensive work.

OKLAHOMA PECAN GROWERS ASS'N.
C. E. Ringer, Secy.

WHY LEAVE IT TO CHANCE?

The folly of leaving to chance the matter of a supply of northern nuts—valuable body-building food, is emphasized again by general conditions this year, of which the following is an instance:

Jonesville, Mich., Nov. 3.—An almost total failure of the nut crop, is the case this fall, throughout this section. Nuts of all kinds are scarce, in marked contrast to the bounteous supply of last year. Walnuts in particular, were so abundant last autumn, that many bushels remained unharvested. This year they are hard to find.

Here is graphic argument in behalf of establishment of commercial nut orchards at once in the Northern States. The public demand for northern nuts is insistent. "Where can I obtain a barrel of black walnuts?" asked a reader. "I want to get into touch with a source of supply of butternuts, walnuts and chestnuts," writes a dealer in nuts. Well, what are the sources? Why longer depend on the only source the Indians had? The Northern Nut Growers Association announces an accredited list of Nurserymen who can supply trustworthy propagated nut trees for planting. That is equivalent to recommending the planting of those trees. Dr. Robert T. Morris, a well-known authority, declares that planters can count upon crops of nuts from commercial nut orchards in as short a period as planters can count upon crops of winter apples from commercial apple orchards. All over the country apple orchards are being established yearly. Why not nut orchards? We do not go into woods in the fall to pick up apples. Why depend upon the woods for nuts? Nurserymen can supply named varieties of nut trees just as named varieties of apple trees are supplied for planting.

Pecans and Poultry

Statesboro, Ga.—An industry that is growing to large proportions in this county is the pecan tree, thousands of them being set out each year and a great majority of the trees are yielding. E. M. Bohler, living near this city, has a large nursery and can hardly supply the demand. As an example of the money to be made from the nut it will be interesting to know that W. H. Smith, living west of Statesboro, has three acres in pecan trees—large trees that bear large nuts. From them last year he gathered 2,000 pounds.

The crop this year is the largest ever known and Mr. Smith is expecting to gather 2,500 pounds. Basing the price of fifty cents per pound his income from these trees would be \$1,250. And besides these trees he has another big income—the poultry business. Under the trees can be seen hundreds and hundreds of white leghorns and Plymouth Rocks. They are all purebred and from his incubator he sends by mail many shipments of young chicks in cartons. And he is not the only one in Bulloch county raising pecans and chickens. Many farmers have gone into the business. Mr. Smith's chickens and trees evidently pay him better than cotton, for he plants but little of it.

AMERICAN FRUITS PUB. CO., INCORPORATED—STATEMENT of Ownership and management of "American Nurseryman" published at Rochester, N. Y., required by the Act of August 24, 1912: Editor, managing editor and business manager, Ralph T. Olcott; Publisher, American Fruits Pub. Co., Rochester, N. Y. Stockholders, Ralph T. Olcott, G. R. Olcott, R. T. Olcott, Jr. Served to and subscribed Oct. 1, 1923, before E. F. Rosenhagen, notary public, whose commission expires March 31, 1925.

THE PEANUT

Georgia Peanut Yield Low

The yield of peanuts, 512 pounds per acre, compares with 602 pounds last year and an average of over 700 pounds per acre. This low yield is caused, the report declares, by an unfavorable season in the old commercial area, South and Southwest Georgia. The yield in the central and north central counties is above the average, the report adds. Total production for the state is 77,824,000 pounds against 96,320,000 pounds in 1922 and 133,320,000 pounds in 1921.

Peanut Market Report

Washington, D. C., Nov. 7.—In the Virginia-Carolina section digging and picking of new crop Virginias is progressing; but rainy weather during the past few days has practically cut off receipts. The quality is generally good, but the rain may weather-stain quite a proportion of hulls. The market is still not well-established but prices at country points have run about as follows; per lb.: Runners 4¼-5¼c, Bunch 5-5½c, Jumbos 5½-6c. Virginia farmers are moving in better volume, however, than Spanish, which had just begun to move when rain prevented further picking. A nominal price may be named for Spanish of \$2.00-\$2.25 per 30 lb. bushel, mostly \$2.10-\$2.25.

New cleaned and shelled goods are being offered in limited quantity, and some mills have old stock available. Sales and quotations, per lb., f. o. b. shipping points, follow: Cleaned: Virginias, jumbos 9¼-9½c, fancys 6½-6¾c, extras 6-6¼c, few 6¼c. Shelled: Virginias, extra large 11-11½c, No. 1, 9¼-9½c, No. 2, 7¾-8c. Spanish No. 1, 12-12½c.

In the Southeastern U. S. the market is strong for farmers' runners, and mills are paying \$100-110 per ton for the stock at country points. Carolot trade in shelled goods is steady but not heavy for this time of year. Prices are firm due to small receipts of farmers' stock. Less carlot sales are reported good. Offerings for prompt shipment are rather scarce.

To Attain Annual Pecan Yields

A large-scale experiment with a 9-5-3 combination fertilizer and with peas as a cover crop, gave an average increase of seventy pounds of pecan nuts to the acre. Where ammonia, phosphate and potash were used singly, ammonia seemed to have more influence in increasing the yield than either of the others. And of the mixtures used those high in ammonia produced larger and better-filled nuts. Also they contained more protein. Potash used alone, however, increased the oil content of the nuts. The results so far justify the conclusion that nitrogen and phosphorus have an important influence in invigorating the tree and in producing well-filled nuts of a high protein content, and potash in producing a clear, desirable colored kernel with a high fat content.—Dr. J. J. Skinner, U. S. Dept. Agr.

H. R. Mosnat, Black Walnut Specialist

Mr. Mosnat, named in the Tribune's editorial, was born in Iowa, attended public and high school there, graduated and went to the State University, graduating there also. His father was brought to this country when about three years old and they settled at Weston, Mo. His grand-father is buried there and on his tombstone the name is spelled the same as now. They came from Austria, border of Germany, France, Bohemia, etc. His mother was born in Wisconsin. Her father was a New England Yankee and her mother was brought over from Saxony a babe in arms.

Dr. J. L. Warvel and wife, North Manchester, Ind., are in Alabama, visiting their pecan grove operated by W. C. Perry.

Just mention AMERICAN NUT JOURNAL.

PRACTICAL ADVICE FROM OLDEST LIVING PECAN GROWER

By Sam H. James, Mound, La.

IT HAS always been a source of a good deal of amusement to me that the men at the conventions who had most to say about pecan varieties were the men who had never grown a pound nor sold a pound of pecans in their life. Although they were constantly talking about pecans, they knew next to nothing about them. Their knowledge was entirely theoretical. It was the immense amount of nonsense that these men were talking that caused me to quit going to pecan growers conventions. Chas. E. Pabst, who knew the pecan growing business as no man in the country ever knew it, told me one day that he had stopped going to the conventions for the selfsame reason. It is very hard for an honest man to sit still and listen to a lot of theorists make statements that are absolutely false.

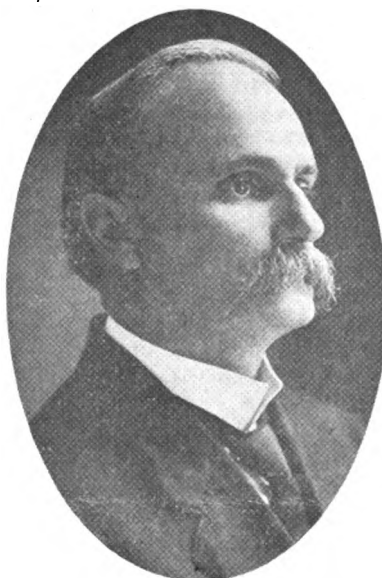
It does look to me that the only man who is competent to discuss pecan varieties is the man who has spent his life in growing and selling them. All my life I have lived close to pecan trees and for forty-five years I have been very active in growing and selling them. I have tested nearly every well-known variety here on my plantation, and few men have sold more pecans grown in his own groves than I have. We have the richest lands in the world here in the Mississippi Valley, and there is usually a heavy rainfall, so where conditions are different varieties may act differently.

Now let me tell you about the Schley pecan. I propagated heavily of it years ago when it first came out. My trees get thorough cultivation, but no spraying. Nearly every one of my trees is now either dead or dying, and serves no other purpose in this busy world than fire wood. My entire crop of Schleys this year consists of 55 pounds, while I am shipping Moneymaker by the ton. Certainly Schley represents the highest excellency among pecans. The Albermanle pippin is the finest of fall apples, and the Black Hamburg is the finest of grapes, yet any grower would go bankrupt in no time who attempted to grow them under ordinary conditions. The world always demands the highest excellence, but seldom gets it. The law of compensations always steps in and knocks the world out of any liberal supply of the highest excellence. Only one man of very great genius is produced in a century. The last century produced Thomas A. Edison. The century before produced Emanuel Swedenborg. The century before that produced William Shakespeare.

The Schley pecan has very great excellence and on that account it is going to be impossible to produce it successfully under ordinary conditions. My Moneymaker trees are now yielding from fifty to a hundred dollars each this year under ordinary conditions by actual weight and sale. Some trees are running over a hundred dollars. The man who said that Moneymaker did not fill out well knew nothing about the variety. I have been fruiting it for thirty years, and in only one year (a year of excessive drought) did it fail to fill out. They sell well on the market, and when a man or woman buys them they invariably come back for more. Thomas A. Edison, through his secretary, bought a lot of Moneymakers from me years ago, and in less than a week his secretary wrote back for more.

The relative merits of the Schley and Moneymaker pecans are illustrated beauti-

fully by two boys I knew at college 46 years ago. Asa was the embodiment of all that was rare, refined, intellectual and spiritual. He was the most charming specimen of boyhood I ever knew. Then there was David. David came in from a poor farm back in the hills. Asa came from the refinement of a big town. David was awkward, uncouth, plain and just a little bit dull, and his only strong point was his great honesty and truthfulness. Every one in this college expected Asa to make a great record in this world, while there was not a person in the whole school who expected anything of David. Forty-six years have passed and what has actually happened. Why, Asa died of tuberculosis over 30 years ago, without having accomplished anything in this world, while David is one of the very greatest



SAM H. JAMES, Mound, La.

major generals in the United States today in full command of an army corps area, and at Harding's military funeral the other day in Washington, David led the procession. And the best thing about David, his success has not spoiled him in the least, he is the same modest, loyal friend he was 46 years ago.

I am going to ask the young men who read this article to cut it out and put it in their scrap book, and in their old age see which is the Asa and which is the David of the pecan world. Some day I am going to write for the American Nut Journal an account of Nathan the Wise and the Legend of the Ring, which illustrates pecan varieties more forcibly than anything I know of. It was my wish to put this in here, but if I do so it will make my article too long.

The Success is a glorious pecan and is doing well with me. It combines great excellency with good health, a combination not often seen in this world.

The Stuart is a fine pecan, but does better on some soils than others. It is particularly adapted to light sandy land.

The James and Delmas are absolutely worthless under ordinary conditions where there is heavy rainfall. In western Texas they do well.

The President is a good pecan, but not a heavy bearer.

The Mobile is a failure with me.

The Van Deman is a superb pecan—every way as good as Schley, but it is a poor Pabst and Russell are fine, healthy pecans bearer and sometimes scabs.

but do not bear heavily enough to be profitable.

The Steckler is the biggest of all pecans and bears well and I had high hopes for it at one time, but it has commenced scabbing, and that ends its value.

There are two magnificent pecans, Carman and James Black that are enormous bearers, perfectly healthy, and pay grandly, but the world has been so busy looking at pecans from the view point of the consumer, that I no longer try to introduce them.

In conclusion I wish to say that my days in this world are growing short. I do not regret it in the least. I am rather proud of it. Two things I am sure of. The other world is full of activity, and infinitely better than this. No man now living in this world has had as long an experience in growing pecans as I have. I wish to tell the beginners in pecan growing two things. I wish to give them two pieces of advice that will be of untold advantage to them in the end if they follow them. They are these:

First—Plant the healthy varieties and leave the unhealthy varieties alone.

Second—Cultivate, cultivate, CULTIVATE, and then give your groves a little more cultivation. For the man who plants the unhealthy varieties of pecans in forty years will have nothing but fire-wood, and the man who does not cultivate will never have any pecans.

The Shotgun for Pecan Thieves

Three boys and a man, negroes, were arrested at Albany, Ga., Nov. 9th on warrants obtained by William P. Bullard, charging theft of pecans from his groves. The nuts were sold to store keepers in Albany.

Mr. Bullard stated that he has had much trouble this fall with thieves in his pecan groves, and that his experience is duplicated in that of many of the other grove owners in this section. Not all of the thefts of his pecans from his groves have been by negroes, Mr. Bullard declared. He said that his overseer discovered white men in one of his groves recently, one of them up in a tree shaking down nuts and the others underneath picking them up and putting them into sacks. They fled in an automobile before the overseer could get close enough to see who they were.

Mr. Bullard said: "People in the city ought to be careful about buying pecans from little boys and strange negroes unless they are certain where the nuts come from, for they are encouraging thieves whose incentive to steal would be greatly lessened if they had no way to sell what they steal."

Growers are maintaining guards with shotguns to protect their pecan crops.

Four-year Old Pecan Trees a Surprise

Montgomery, Ala., Nov. 5—That Montgomery soil is well adapted to the growth of pecans is well proven by three pecan trees in the garden of Mr. and Mrs. J. C. Harrison, 45 Hood street, Highland Park. These trees were set out four years ago this winter. They were then what is known as the two year old stock from a local nursery.

Last year one of these young trees bore a few pecans and while the fruit was small it was perfectly shaped. This year the crop surprised Mr. Harrison, as he had not thought that there would be anything like a yield so soon.

Washington, Ind., Nov. 6—Pecan gatherers report the 1923 pecan crop in the White river bottoms almost a total failure, some of the trees being barren of the nuts.

If it relates to nut culture it should be in the AMERICAN NUT JOURNAL. Please send it in.

The American Nut Trade: Market and Crop Reports

THE ALMOND

Almond Growers Extend Market

Following up its successful fight the California Almond Growers exchange will shortly increase its capital investment to approximately \$500,000 to provide facilities for the vacuum packing of blanched and salted almonds under their famous Blue Diamond brand trade mark.

This means that more than 3000 almond growers of the state who are members of this co-operative association will become a dominant factor in the shelled almond business of America, as they already are in the unshelled almond traffic.

The present investment of the almond growers in Sacramento is more than \$350,000 and present plans approved by the board of directors of the exchange call for an immediate investment of \$30,000 or more increase in present equipment and new installation necessary for the vacuum packing of their almonds.

These shelled almonds packed in glass and tin will move to consumers throughout the present wholesale and retail channels.

At present most of the blanched and salted almonds are sold through confectionery houses and this fact, it is said, explains in part opposition of the confectionery interests to the farmers of California during their tariff fight.

The almond growers are determined to put their product, as sanitary as certified milk, on the tables of the housewives of America against the foreign grown almonds which are sold in bulk as the present time.

In going after the shelled almond market of the United States, officials of the California Almond Growers exchange are attempting to enter the really remunerative aspect of the almond traffic in America, as 80 per cent of the money spent for almonds in this country goes for the purchase of shelled almonds rather than nuts in the shell.

In his report at the annual meeting of the California Walnut Growers Association, General Manager C. Thorpe said:

The absolute fact is that the California walnut industry is facing heavier and more severe foreign competition each year; for instance, during the calendar year of 1922 there were imported into the United States 48,035,741 pounds of walnuts—a larger amount than has ever been imported in a twelve months' period, and this in spite of the fact that duties have been increased from 2c to 4c on unshelled walnuts and from 4c to 13c on shelled walnuts. These imported walnuts were sold to the trade at an average price of approximately 15c a pound, as against an average price of all association holdings of between 22c and 23c a pound.

Foreign walnuts are not all of such inferior quality as many growers seem to believe. Many of the lots will crack 90 per cent good and more, and practically all of the meats are bright in color. Of course, some lots of foreign walnuts are not so good, but much of the poorer stuff has been sold at prices ranging from six to ten cents a pound, while the very best quality goods sold during the fall months averaged from fourteen to eighteen cents a pound, which is considerably below the California price.

"The great price differential is due to the

lack of uniformity in grading of foreign walnuts and to the lack of a satisfactory distributing agency," says Mr. Thorpe. "Often we hear of a retail grocer who has purchased a bag of foreign walnuts at several cents a pound under the California price. Such retailer will say that he is done with the California product for good; that the California growers ask an unreasonably high price for their product. He claims that the bag of foreign nuts is as good or better than Californias and costs him several dollars less, but possibly the next bag of the same variety that the same retailer purchases will be of very poor quality.

"The retailer's customers will complain and return their purchases of walnuts to him even though he finally decides to sell them below cost. They prefer quality to a price concession. This retailer usually concludes that in the long run he is making a better profit and serving his customers more satisfactorily by paying the higher price California growers ask for their walnuts, which are always practically the same in quality and satisfy his customers.

"It is such year-in and year-out uniformity and dependability that convince good merchants it is to their advantage to pay the higher price for Diamond walnuts. If prices comparative to those established during recent seasons are to be maintained, the association must continue its present standards of grading which are barely high enough to prove acceptable to the average consumer."

The state's walnut acreage has passed the hundred thousand acre mark, and there are coming into bearing from four to five thousand acres each season. It is estimated that the new plantings are now approximately 6,000 acres each year. Thus, when all present planted acreage has reached the bearing age of eight years the state's normal production of walnuts should total about 90,000,000 pounds, almost double the 1922 season's output. Still there is no let-up in planting, but rather, indications point to a continued increase.

It is not apparent that the walnut industry faces any overproduction problem especially within the next decade, as long as growers interest themselves sufficiently to see that the best minds in their communities are sent to represent them in directors of the California Walnut Growers' Association.

The average local association does an annual business of over \$300,000 a year, some of them exceeding \$1,000,000 a year. These businesses are big businesses and they need able men to manage them. The locals which employ the best managers and which pay a fair salary to retain such able men's services are the associations that are operating the most economically and making the most satisfactory returns to their growers.

Each passing year brings to more growers the realization that in the walnut business producing and marketing are equally important and go hand in hand. The best marketing organization in the world is useless without a reasonably good product to sell, and conversely, a fine crop avails the grower nothing unless it can be sold. Consequently, the proper packing of walnuts is absolutely necessary to their advantageous sale.

AMERICAN NUT JOURNAL, the Official Journal, three years for \$5.00; twelve months, \$2.00; single copy 20c.

THE CHESTNUT

1200 In a Chestnut Hunt

Lancaster, O., Nov. 1—Twelve hundred inmates of the Boys' Industrial School were turned loose Tuesday for the institution's annual chestnut hunt. The youngsters had the time of their lives and not one of the 1200 made an effort to escape. Chestnuts were plentiful this year in the groves at the State Farm.

Chestnuts Bring High Prices

York, Pa., Nov. 5—Chestnut prices are high, due it is believed to the blight. Growers of Page County, Virginia, recently sold enormous quantities of chestnuts to buyers from this place at the rate of 14c a pound, or \$8.40 a bushel of 60 pounds, equivalent to around 20c a quart. They were of excellent quality. Chestnuts shipped here from Virginia are retailing at 60c a quart. Twenty-five years ago, before the blight killed off the chestnut trees in Pennsylvania, chestnuts sold in the stores at 6c a quart.

Many Chestnuts In Pennsylvania

Meyersdale, Pa., Oct. 10—Despite the fact that the blight is rapidly devastating the chestnut forests of Pennsylvania and Maryland, there are still many trees of this useful species that have withstood the plague and most of the surviving trees are this year loaded with nuts.

Although there have not yet been many heavy frosts on the mountains, the chestnut burrs are bursting open and the ripe nuts are falling to the ground with every wind that blows. Chestnuts began to make their appearance in the local markets last week, and last Sunday it appeared that every family that owned an automobile, or could borrow one, was out nutting.

Along the state highways in Somerset and Garrett counties Sunday afternoon were parked hundreds of automobiles wherever chestnut trees abounded, and those who went forth in the cars were busy searching the ground for fallen nuts. Many of the nuts that still remained in the burrs were clubbed down, and bushels of them were carried home in quantities ranging all the way from a few handfuls to several quarts.

BLACK WALNUT

Black Walnut Interest

H. R. Mosnat, Chicago, Ill., black walnut specialist in his paper prepared for the Northern Nut Growers Association convention said:

"The growing of black walnuts in a commercial way will require education but already there is a growing interest. Several of the large weekly publications have within the last couple of months carried full page, illustrated articles on black walnuts. One of these in a magazine of general circulation which is over half a million, within a month resulted in almost one hundred letters asking for additional information, which shows that a great many people want to know more about the possibilities of black walnuts and this interest will certainly increase when profitable black walnut orchards are actually growing and paying good profits. Already men are putting in black walnut orchards or groves of several hundred acres and one such planting of 1,600 acres is proposed, but it will be partly hardy pecans. This shows rapid development into a real industry of magnitude."

Black walnuts and pecans were reported plentiful last month on trees near Peoria, Ill.

THE PECAN

GEORGIA

Georgia's Big Industry

Unquestionably, within a few years, the pecan will be to South Georgia everything, and perhaps more, than the orange and grapefruit industries have been to Florida.

The National Pecan Exchange at Albany, in Dougherty County, a co-operative selling organization, has 400 members and easily will handle 1,000,000 pounds of pecans this season. The total crop for Georgia is estimated at 5,000,000 pounds. This will bring into the state, within 60 days, some \$3,000,000 to the growers.

There is a great and wonderful future for South Georgia in this industry; and perhaps for some other sections of the state, for that matter, for pecans have been grown further up-state, though not of the paper shell variety.

The Georgia orchards are planted, as a rule, some 20 trees to the acre—at an average of estimated profit of about, at present prices, \$300. Georgia now has about 100,000 acres in papershell pecan orchards; which, as amazing as it may seem, produce about 80 per cent of the entire world's output.

Georgia's pecan orchards in full commercial fruitage easily are worth from \$500 to \$1,000 per acre—though few are for sale, at any price. The largest commercial papershell pecan orchard in the world is the Keystone in Southwest Georgia; it contains 7,500 acres.—Fitzgerald Ga., Leader.

Suit for Infringement

Charging that a number of Macon men infringed on the trade name of his organization, Sidney G. Simons, of Columbus, filed an injunction petition in Bibb Superior Court Oct. 27th against John H. Gautier, Frank F. Herndon, Dr. Timothy Harden, Davis W. Campbell and S. M. Dunwoody, of the Southland Pecan and Blueberry Company. Judge H. A. Mathews granted a temporary injunction against the company and set a hearing for Nov. 24. The injunction was filed by McGutchen, Bowden and Gaggstatter, of Columbus.

The plaintiff declares that he is operating a business under the name of the Southland Pecan Company and has been operating the business for the last five years. The trade name is registered in the United States Patent Office. Mr. Simons alleges in his petition that the incorporators of the Southland Pecan and Blueberry Company wilfully simulated the trade name in order to get the benefit of the business of the Southland Pecan Company.—Macon Telegraph.

Pecans Vs. Cotton

B. K. Simon, pecan merchant, Albany, Ga., a few days ago directed attention to the unloading of a wagon load of loose pecans at his warehouse, saying that ten years from now such a scene will be a familiar one throughout the Albany district. In the palmy days of cotton culture in this district bales of cotton were brought into market at Albany in similar manner. The 3,000 pounds of pecans in this load cost Mr. Simons probably \$800; they were not fancy pecans. The same amount of higher grade would have cost \$1200 to \$1500.

The Atlanta Georgian last month carried a long editorial on the bright future that awaits the pecan growers. The Georgian estimates Georgia's crop this year at five million pounds, which will bring into the state three million dollars. The Georgian also says that the pecan will be to South Georgia what the orange industry is to Florida, or even more.

The yield of pecans from Daphne Farms on east side of Flint river near Cordele, Ga., owned by Dr. M. J. Keyes, this fall was estimated at 30,000 pounds.

J. M. Patterson, president of the National Pecan Growers Association and of the Paper-shell Pecan Association, Putney, Ga., is recovering from a sharp attack of illness.

John A. Davis, business manager of the Albany, Ga., Herald is the new president of the Citizens First National Bank of Albany, Ga., succeeding Dermot Shemwell, resigned.

MISSISSIPPI

Home of Fancy Pecans

Big Point, Miss., Nov. 9—The paper shell pecan crop is not good; seedling crop is good. The acreage of paper shells has been increased over last year. Seventy-five per cent of the crop is paper shells. Shipments began November 15. Carlots will be loaded. The original Schley tree (which is the best variety known) is at Pascagoula. The Success parent tree is at Ocean Springs. It is a matter of fact that the fanciest pecans grown came from this county. The fancy fruit and nut dealers at Chicago will bear this out.

85 Per Cent Paper Shells

Lucedale, Miss., Nov. 8—Shippers estimate the pecan crop as fair. Acreage has not been increased this year. Eighty-five per cent of the stock is paper shells and the remainder uncultivated or wild varieties. Shipments began November 1. Carlot shipments will not be made.

Greenville, Miss., Nov. 7—Pecan prospects here are poor. The acreage in paper shells has not been increased. All the stock is of the paper shell variety. Shipments will begin November 15 and carlot shipments will be made.

Vicksburg, Miss., Nov. 8—Estimate the pecan crop at about one-fourth. Ten per cent of the stock is of the propagated kinds. Movement is now on. Carlot shipments will be made.

Woodville, Miss., reports a probable output of 60,000 pounds of pecans this season. Weekly shipments of 1000 pounds began early.

TEXAS

Profit from Carload of Pecans

By J. H. Burkett, Austin, Tex.

Carload of pecans f. o. b. Austin figured at 15c per pound of 30,000 pounds of nuts. . . . \$4500.00
Freight at \$1.33½ per cwt. . . . 400.50
Brokerage or Commission 100.00

Cost of car delivered in Chicago . . \$5,000.50

The nuts are usually graded after being received and an average of 25% of the car after being separated is classed, "Choice," "No. 1," "Jumbo" and other arbitrary designations and sold to dealers at an average of 25c per pound, or a total of \$1875.00. Seventy-five per cent of the car, 22,250 pounds, is run through the shelling machines where the nuts are cracked and the meats separated. The meats are placed on the market as "pecan halves" and "pieces." The halves usually bring an advanced price over the pieces of from 3c to 5c per pound. The seventy-five per cent of the car, 22,250 pounds, when shelled yields 8,990 pounds of meats. Estimating the price received for the meats at 80c per pound equals \$7,120.00. This with the \$1875.00 brings the total value of the nuts to \$9,077. If the expense of shelling and packing these meats be figured at 15c per pound for the meats there is \$1335, leaving the net income for which he paid \$5,000, a net profit of approximate average of 25.8c per pound on the car of nuts for which he paid \$5,000, of approximately 9c per pound for the carload.

The above estimate is not represented as being absolutely correct but it is believed to be approximately accurate and conservative and is intended for the purpose of calling the attention of pecan growers to the fact that it would doubtless be profitable for them to grade and shell and market their pecans co-operatively. The present pecan crop should net the growers not less than 20c per pound f. o. b. their station and they would realize that price if they were effectively organized, so as to work in concert.

Notables Thank Texan for Pecans.

Dallas, Tex., Nov. 5—Notes of appreciation from Woodrow Wilson and David Lloyd George have been received by S. A. Fishburn of Dallas, thanking him for shipments of pecans he made to them Oct. 20th. The pecans were the first of Mr. Fishburn's jumbo pecan grove.

Just mention AMERICAN NUT JOURNAL.

Texas Pecan Crop 20 Per Cent

State Senator T. H. Ridgeway, San Antonio, Tex., a member of the Texas Pecan Growers Association and owner of about 1000 pecan trees near San Antonio, said last month that the Texas crop of pecans will be about 20 per cent of an average crop. Late frosts last spring are believed to be the cause.

"Poor production is likely to result in higher prices," stated Senator Ridgeway. "The buyers in the vicinity of San Antonio are not yet active and no definite prediction of price can be made until they begin purchasing the crop. Pecans are now selling for about 12c a pound wholesale, and are being retailed locally at from 30 to 35c a pound."

Concho River Pecans

Waco, Tex., Nov. 1—Waco dealers are getting in pecans, but the crop is moving slowly. Two carloads of the Concho river pecans have just been shipped, and it is estimated that the crop on the Concho river area will be about 25 car loads. Rains have delayed gathering, thus far.

Texas Pecan Association

Secretary Oscar S. Gray, Texas Pecan Growers Association, Waxahachie, Tex., reports a membership of 120 and says that the next meeting may be held in Fredericksburg. Gillespie county leads other Texas counties in point of membership, having 20 members.

Cuero, Tex., Nov. 1—Harvesting of pecans in Guadalupe valley began early last month. While the crop is rated as a light one, many trees have yielded heavily. The W. H. Lewis and J. D. Houston bottom lands were among the best in this section.

Houston, Nov. 1—Lighter offerings of pecans are indicated by late reports of the Texas crop. Offerings range from 12½ to 25c a pound for new crop and 20c for hold-overs. Higher prices are expected near the holidays.

It is estimated that Bend, Texas, will ship 13 carloads of native pecans this season, as compared with 25 carloads in the big yield year of 1919 and one carload last year.

Stokes Bros. Co., Lampasas, Tex., last month contracted for the entire 1923 output of the Bend Pecan Growers Association, estimated at 400,000 pounds of pecans.

A large crop of pecans is being harvested at McKinney, Tex. The nuts are bringing 16c.

At Bellville, Tex., there is about half a normal crop. Pecans are selling at 15c.

OKLAHOMA

Good Oklahoma Pecan Crop

Norman, Nov. 3—The year's pecan crop is the largest that Oklahoma has produced for years, according to P. K. Norris, Cleveland county farm agent.

Pecan Crop Beats All

Pauls Valley, Okla., Nov. 6—Pecans are coming to market here rapidly. In many instances the farmers' pecan crop will bring more money this year than any crop grown on the farm. Often the pecan crop nets a farmer \$500. The crop this year is especially fine and the price is good.

The legislature of Oklahoma has a law effective last July, making it a misdemeanor to flail pecan trees or gather the nuts on another's property without permission, under penalty of a fine of \$50 to \$500 or imprisonment for 30 days to six months or both. The Oklahoma Pecan Growers Association will see that this law is enforced. It is no longer necessary to post pecan groves.

R. W. Bingham, Jefferson Co., Ky., and Robert E. L. Spence, Dougherty Co., Ga., have made application in Dougherty Co., Ga., for incorporation of the Leebeess Pecan Company with capital stock of \$50,000.

If it relates to nut culture it should be in the AMERICAN NUT JOURNAL



In the Pacific Northwest

Editor American Nut Journal:

Walnut trees are heavily loaded with first quality nuts with very little blight. One orchard that I was in last year averaged 1200 pounds to the acre on 42 acres, ages averaging fourteen and one-half years. This year the same orchard is averaging 1500 or 1600 pounds to the acre or nearly twice the average yield of California which is 825 pounds to the acre. Other orchards are the same in crop returns. One orchard belonging to W. A. Ward of Battleground, Wash., is this year bearing a paying crop at four years and the orchard next to it, six years of age, will pay a profit above all expenses. Mr. Moore has a fifteen year old Franquette walnut tree that is bearing a load of two hundred pounds of first class walnuts this season. Many of the limbs on this tree are propped up with long poles to keep them from breaking. It is on this tree that I saw my first evidence of sunburn which is not to be confused with blight but which is a great factor in profits and lack of profits in walnut growing in California. We had a full load of walnuts on our nine hundred thirteen-year-old trees but cut them away when grafting the trees over to the Vrooman Franquette and am not at all sorry that we did although many a croaker said that grafting them over would prove disastrous in that we would lose several crops and would have to regraft at great expense etc. But the grafting was imminently successful, probably the most successful marketing. Our nine hundred thirteen-year-old trees had a full load of walnuts but we cut them all away in order to graft the seedling trees over into the Vrooman Franquette which is our greatest and heaviest bearing commercial walnut for the Northeast. This was the biggest topworking job ever undertaken in this section and met with great success considering that I was the only man on the job that had ever grafted a tree before. With twelve men I completed the work in less than three weeks and secured one of the best stands of the season, a stand of between 65 and 70%. With a more experienced crew I will be able to improve on this stand somewhat.

Filbert trees have a uniformly heavy crop and in some instances the crop is hard to beat. Mr. Dorris of Eugene, Oregon, has the heaviest crop of his experience, many of his trees having sixty and seventy pounds of nuts on them. Mr. Biddle of Vancouver, Washington have trees that have borne in excess of sixty pounds this season while George Gaesway of Battleground, Washington, has them all beaten when it comes down to record yields, his six-year-old Du Chilly filbert tree having thirty pounds of nut on it this season and his twenty-four-year-old trees averaging ten pounds to the tree or over two ton to the acre if planted ten by ten feet as I am planting my trees. W. A. Ward of Battleground has a record yield of Du Chillys and claims that he would ten times rather plant Du Chilly than Barcelonas for his Du Chillys bear so much heavier and he gets from five to ten cents per pound more for them than for the Barcelona and he has them both in full bearing to back up his statements. This is something for the Barcelona men of Oregon to

look into. I have seen the trees many times this summer and know that the bearing cannot be improved upon and know that they have been bearing steadily ever since they found the right pollinizers, but what about this husking problem of the DuChilly? The Washington growers' claim that there is not much to it and Prof. Schuster, A. M. Gray and many others claim that it costs four cents per pound to husk them. Some claim that the Du Chilly of Washington is not the same as that of Oregon but as they came from the same Nursery originally and look the same, I believe that they are the same nut and if their is any difference, that it must be in the locality and not in the variety.

Prices are generally predicted lower for this season though, for the life of me, I fail to see why they should be any lower than last year. Walnuts might go a cent or two less but to have filberts all drop to the level that held in a few places last year is absolutely without a reason. The filbert grower that had a few filberts to sell and let good big nuts on to the market last year for less than twenty cents ought to be taken out at sunrise and shot for he is doing the industry a vast amount of harm which will take years of hard work to remedy. A little co-operation between growers would easily result in holding the price up to where it would give big profits and serve to encourage the planting of thousands of acres and the formation of a highly satisfactory horticultural pursuit. Somebody has got to establish a market outside of our own markets here in the Northwest that will absorb the surplus or at least a part of the crop for there is not a surplus as of yet, though our local men in the commission business sell our nuts for what our merchants can buy the imported nuts for. Our merchant will pay as much for quality stuff as the eastern man if he can be shown that it is quality and that it is bringing a good price elsewhere.

I find that the filbert is readily budded and grafted and have gotten highly satisfactory stands on nearly fifteen thousand trees which were worked on last spring and late summer. So much for the ones that said it would not be successful. The last batch of walnut buds that I put in are looking fine though as to percentage it is too early to say definitely though it looks like it will be between thirty and fifty per cent. I got three hundred trees out of the 5500 that I put in but I have been learning a lot through my experimentation. Budding is a lot cheaper and makes a better tree if it can only be made to give a satisfactory stand.

RICHARD A. TURK.

Washougal, Wash.

Walnut True from Seed?

Men from the Oregon Agricultural College who are interested in the walnut industry were in Brownsville, Ore., recently studying the Kirk walnut tree and seedling trees there now in full bearing. It is understood that they will make experiments and tests of nuts from several trees at Brownsville. It is claimed for the Kirk strain that the seedling trees raised from the nut produce as prolifically and produce just as good walnuts as does the Kirk tree, which bears on the average 500 pounds of nuts per season. There is a great demand for seedling trees of this stock and to meet the demand Glenn McFarland at Brownsville is putting out a nursery which in 1924 will supply thousands of trees.

Bears Early as an Apple Tree

W. H. Johnson, Rising Sun, Ind., reports a crop of 30 English walnuts from a tree five years old in his yard.

California Walnut Crop

The Santa Barbara county walnut crop this year will exceed 2100 tons and at the prices fixed by the California Walnut Growers' association will bring about \$1,050,000. Of this great sum a larger than usual percentage will go into the hands of the growers because the harvest this year is being handled more cheaply than ever before in the history of the association.

Although the price of No. 1 nuts this year is 22 cents against 22½ last year, the profit of the rancher is expected to be greater because of his savings in the harvest. Improved methods used in the walnut houses are aiding the natural causes for a quick and cheap harvest. Recently the Goleta and Carpinteria branches of the California Walnut Growers association turned into headquarters as estimate for this year's harvest that showed the expected totals to be 1230 tons of No. 1 nuts, 124 tons of No. 2 nuts, 7 tons of budded and 75 tons of grades.

The California Walnut Growers association this year lowered its prices on walnuts slightly below the prices of last year because the marketing of other food products showed that lower prices would be demanded if rapid marketing was to be accomplished.

Pomona District Receives \$528,000

Pomona, Cal., Nov. 3—Walnut growers of the Pomona district will receive approximately \$528,000 for the 1923 crop, according to revised estimates made with virtually the entire crop ready to go through the two packing houses which handle the bulk of the crop.

Approximately 740 tons of nuts have been shipped from the plants of the Chino Walnut Growers' Association and the Walnut Fruit Growers' Association. The processing and shipping of nuts will continue on a much reduced scale until the pool closes November 15.

Each house expects the total output this year to be approximately 600 tons of nuts, which, because of the improved quality will bring an average price of about 22 cents a pound. The quantity of low grade nuts this year is lighter than usual, and the amount of culls, which generally runs 10 per cent of the entire crop, has been cut down until this year not more than 4 per cent are culled. L. T. White, secretary-manager of the Chino association said.

The output of the walnut association packing house will not be as large as was anticipated at the beginning of the season. Manager James Wolstencroft said, but the shortage in point of tonnage will be virtually offset by the higher quality of the nuts.

Electrically Cured Walnuts

The ripening of the walnuts in California is artificially accelerated by placing the green nuts in trays, arranged in cabinets, beneath which are electrically heated grids. Air is blown through the heated grids at low speed and warmed and thoroughly dried before passing over the walnuts, and it is possible by this means to accomplish in 24 hours a drying process that usually took from a week to 10 days, according to weather, under old conditions.

Walnut Growers Iron 'Em Out

Almost every walnut grower in California has as part of his equipment an electric ironer. These growers consider the ironers essential to the culture of walnuts, because the only known way of killing the larvae of the codling moth, which does great damage to walnuts, is to pass the bags through an electric ironer. The heat of the ironing shoe does the work. Neither steaming nor boiling the bags has the least effect upon these destructive larvae.

In 1922 the domestic production of English walnuts was 27,000,000 pounds, valued at \$9,720,000. The same year the importations were: From France, 20,488,977 pounds; Italy, 9,537,346 pounds; Chile, 1,051,345 pounds; China, 8,358,612 pounds; Japan, 1,598,504 pounds.

C. A. Reed, pomologist in charge of nut investigations, U. S. Dept. Agriculture, is in the Pacific Northwest looking into the matter of improved varieties of English walnuts and filberts.

THE PECAN

The Product of 24,000 Acres

The secretary-treasurer of the National Pecan Growers Exchange, Harold B. Taylor, says the exchange will grade and market the pecans from more than 24,000 acres this season. He says:

The National has many members owning but a few trees, but they believe in co-operative marketing, see the advantages of selling through one central organization and want to support, even in a small way, what is already the largest marketing organization for papershell pecans in existence.

The National Pecan Growers Exchange has grown so rapidly, both in membership and in acreage represented, that plans are being considered for opening one or two branch exchanges in neighboring sections next fall. Last year the cost for grading and marketing, including all over head expenses, was very small when compared with what similar work would cost an individual or organization handling a small poundage. This year the Exchange expects to handle anywhere from 750,000 to 1,000,000 pounds of pecans of every description, from seedlings to the large, budded varieties. With such a poundage upon which to prorate expenses, it is natural that the cost per pound for handling will be further reduced this season.

Here and there a speculator or other selling organizations have succeeded in breaking into the large markets and underselling the Exchange a few cents per pound. The Exchange has but one set of prices to all jobbers for its standard brands. As this fact is widely known, the National is able to enlist and hold the willing services of the best merchandizing distributors in the country. Orders are brisk; varieties as a whole are running true to type and are well filled. Many of the standard varieties are going over the ends of the graders into what is called overgrade, for which a premium is received.

The Exchange is open to visitors from 9:00 a. m. to 3:00 p. m. every week day and we will be glad to show interested parties through the plant, which has a capacity of a carload a day.

Scab Scarce Near Mobile

Dr. L. E. Miles, state pathologist, Auburn, Ala., recently spent two days in Mobile county, Ala., pecan orchards inspecting trees, at request of W. J. Durand, owner of the South orchards, and other growers. Dr. Miles said he found scab prevalent in only two cases and then not to large extent. There is a bit of anthracnose in the Mobile orchards, said Dr. Miles. However, he stated this disease is of little or no consequence, and can be eliminated with a few sprayings of Bordeaux mixture as in the case of scab.

At the South Georgia district fair in Albany, Ga., Oct. 23-27, prizes of \$50, \$35 and \$15 were offered for the best, largest, greatest variety and most attractively displayed individual exhibits of pecans.

Many that have the proper soil will not set pecans, because they are not willing to wait. They do not realize that they are going to wait just the same whether they set a pecan grove or not, and that the wise man is the one who sets out his trees and ultimately realizes on the investment in time and money.

Eastern Grown English Walnuts

The nut with the real nut flavor, direct from Nature's hand to you, untouched by cosmetics. In 10 lb. lots or over, to one address, delivered, postage paid and insured, 40 cents per pound, upon receipt of order accompanied by N. Y. Draft or P. O. money order. Grown and sold by

EDWARD A. SELKIRK,
589 Richmond Ave., Buffalo, N. Y.

References: Buffalo Trust Co., Buffalo, N. Y., Fidelity Trust Co., Buffalo, N. Y.

QUEENSLAND NUT

The continued popularity in Australia and the growing demand over-seas for the Australian "bush nut" is likely to induce growers to devote attention to its more extensive cultivation. The Australian "bush nut," variously known as the "Queensland," "Australian," or the "Polar" was first discovered at Moreton Bay in 1869 by the late Baron von Mueller, and has spread to America, China, Chile, Fiji and the Pacific Islands. American publications on nut culture as far back as 1896 pay tribute to it as an "esteemed nut," and Luther Burbank sings its praises. It is very much like the filbert, says Consul Romeyn Wormuth, Newcastle, in a report to the Department of Commerce. The fruit has a fleshy exterior encircling a hard, thick shell, much harder to crack than a walnut; the kernel is quite free from the shell and is remarkably rich and agreeable in flavor.

For over forty years the idea of a thin shell "Queensland" has been the dream of experimentalists and consumers, and according to Consul Wormuth this variety has at last been produced in Australia. About 1910 a Mr. Waldron of Upper Eungella made the discovery on his farm of a tree bearing a thinner shelled nut and by much labor and thought, with the aid of science, Mr. Waldron produced several generations of trees each giving a thinner shell and differing slightly in texture and color of the kernel, but showing an improvement in the size and flavor of the nut and in the thinness of the shell. The "Queensland" nut is one of the most easily cultivated, requiring practically no attention, the trees bringing in an increased revenue each year.—U. S. Dept. Commerce.

The Lure of the Pecan

Eight people are facing charges of misdemeanor in connection with the entering of property and taking pecans therefrom, and farmers around Fulshear, Texas, are becoming angry, as a result of the continued depredations of Sunday visitors and motorists from the city, who despite signs warning against it, enter fields near there and gather pecans.

Few people are acquainted with the fact that there is a special statute in the state laws of Texas which protects pecans in the same way that other crops are protected, and that a penalty is attached to this law which is as serious as the penalty for misdemeanor theft.

The walnut crop of France in 1922 was more than double that of 1921. A consular report places the crop of 1922 at between 106,800,000 and 114,600,000 pounds, as compared with 48,944,000 pounds in 1921.

PERSIAN WALNUT

Dusting Walnut Trees

By Prof. Ralph E. Smith

Fifteen years ago the writer stated that "the application of fungicides and insecticides to walnuts is practically impossible on account of the great size of the trees." Last week he saw two young men with a duster thoroughly treat 10 acres of walnuts for aphids before breakfast and later in the day watched a battery of five "supergiant" sprayers covering 40 acres of walnuts per day with liquid lead arsenate-nicotine spray for the control of codling worm and aphids. Verily, the world do move! The dusting referred to was done with one of the new "self mixing" type of machines built by the Bean Spray Pump Company of San Jose, described in bulletin 357 of the California agricultural experiment station. This machine was ingeniously mounted upon an automobile by Frank Baker and W. Hollister of Goleta. Driving slowly up and down the rows, under the trees, they found it possible to eradicate the aphids more thoroughly than ever before. This was done at a cost of less than half that of the old method of using factory mixed dust, originated by the writer at Goleta in 1919.

His Mail Flooded With Inquiries

D. H. Hulseman, Silverdale Nut Ranch, Lakeside, Wash., whose marked success in raising seedling English walnuts has been referred to in the Journal, writes that this fall he was again unable to supply the demand for the exceptionally fine English walnuts he produces. He says:

"The time has just come that the whole country wants to go into walnut growing. If I had the trees I could sell three or four thousand. Since the article appeared in the American Nut Journal telling how I am growing walnuts my mail has been flooded with letters asking for particulars."

Moving an Orchard—A grove of 8,248 lemon and orange trees, interplanted, was moved from another place recently from the Limoneira ranch, Ventura, Calif., with the loss of but one tree.

If it relates to nut culture it should be in the AMERICAN NUT JOURNAL. Please send it in.

FOR SALE—Twenty-year, 60 acre budded, bearing pecan grove; 30 acres Schley, 10 acres each Frotcher, Stuart and Van Deman; Baconton, Georgia, adjoining Jackson and Barnwell groves. In first-class condition, high state of cultivation. IS GOING TO BE SOLD. Write for prices. JAMES D. EVANS, 2035 Washington Avenue, Philadelphia, Pa.

ALL INTERESTS CO-OPERATING

ATENTION to the mutual interests in the Nut Industry is succinctly directed by Manager T. C. Tucker of the California Almond Growers Exchange: "We are a strictly co-operative organization, including Grower, Broker, Wholesaler and Retailer."

This may be said also of organized effort in the production and distribution of Walnuts and Pecans, each of which is represented in Associations.

It is because of this co-operative feature that the American Nut Journal combines the news of the Nut Industry in the fields of Production and Distribution. Its Market and Crop Reports will be of increasing value.

It is of prime importance that the market shall be supplied; a supply is the basis upon which a market exists.

It is also of prime importance that a market be created and maintained; distribution of the product is what makes the industry.

The Journal desires to co-operate heartily with producer and distributor, and to that end welcomes frequent communications by way of comment on current events, personal mention, trade news and suggestions. It is the logical medium for interchange of trade comment and the recording of trade activities.

In the Northern States

Few Northern Pecans This Fall

Flooding of bottom lands, building of levees, competition of the improved product from the south, and increasing use of pecan lumber for fine axe and tool handles, is gradually forcing Illinois pecans off the market, or leaving the decreasing crop almost entirely for consumption in the localities where grown, according to the federal crop reporting service for Illinois.

There will be only a fair crop of any kind of nuts in Illinois this year, the report says. Besides pecans there are some hazelnuts, black walnuts, butternuts and hickory nuts, which, scattered reports say, will give either poor or fair crops.

Among the counties of the state, Randolph produces the most nuts. Pecans are found along river bottoms, and most reports this year are from the Wabash bottoms, from Vincennes to Cairo, and from the Mississippi bottoms from Cairo to Memphis.

At Clinton, Conn.

J. J. Kelsey, Clinton, Conn., reports good growth of all his nut trees despite one of the driest seasons on record. He has three Royal walnut trees in bearing. The oldest is 8 years old; this is its third bearing season. Three years ago it bore two nuts; last year 30; this year 90. Four of the Miracle chestnut trees are bearing. The oldest is 4 years old and has had three annual crops. Mr. Kelsey believes this tree is blight proof. There are several blighted native trees near by, with seemingly no effect; but he will wait another year and perhaps two before offering the trees for sale. The Buddy nut trees have surpassed his expectations. They will average about four feet of growth this year. He regards them as superior to the native butternut. We have found the kernels to be excellent.

Indiana Nut Crop

Petersburg, Ind., Nov. 2—The 1923 pecan crop in the White river bottoms is almost a failure, some trees being barren. From the 1,000 trees in the pecan orchard, nine miles west of Petersburg, fewer than 100 bushels of pecans will be gathered. Late frosts in the early spring damaged the bloom.

The hickory nut crop in the bottoms is small this year, but on the hills there will be a large crop. The walnut crop is large in some places, while in the others the trees are only partly filled. Walnuts are selling at \$1 a bushel, while hickory nuts sell for \$1.50 to \$1.75 a bushel.

To Grow Pecans in Indiana

We learn through J. F. Wilkinson, Rockport, Ind., that Eugene Busler, Springdale, Ark., has purchased at Rockport 40 acres on which he will plant a pecan orchard of Northern varieties. It is planned to set half the acreage this fall.

Nut Tree Planting in Illinois

Henry D. Spencer, Decatur, Ill., says interest in nut culture in his section is growing. The H. Mueller Mfg. Co. have a club house for the officers and employees, upon 127 acres of land along Decatur Lake. This year the following trees were planted: 54 filberts grown by Conrad Vollertsen, Rochester, N. Y.; 6 pecans; 10 chestnuts; 6 Thomas black walnuts; 6 Stabler black walnuts; 6 Ridenhower almonds; a total of 78.

Several others have planted from 2 to 12 nut trees each.

Nut Trees for Canada

It would be indeed well if the planting of nut-bearing trees were taken up in the Niagara district with some enthusiasm. With in one generation there would be benefit, while after that there is no telling what a heritage might be left to this part of the Dominion. What a memorial for those living to leave behind a wealth of trees! It would be a blessing for which posterity would be truly thankful.—St. Catharines, Ont., Standard.

The old Elmore "walnut grove" in Gilboa township, Indiana, is no more. The sturdy walnut trees that have stood for years are being hewn down and shipped to a cabinet and furniture factory.

Severe late frosts last spring are blamed by horticulturists and foresters for the dearth of favorite kinds of squirrel provender in the woods. From the Middle West and from up-state New York come reports of widespread distress in the woodland recesses because of the failure of forest trees and bushes to provide their habitual harvest of seeds and nuts and berries.

H. R. Mosnat, Morgan Park, Ill., is handling large quantities of black walnut kernels this fall. He announces that he can ship up to 10,000 to 12,000 pounds packed in 150 pound barrel lots, although the 1923 crop is comparatively short. The profits he will devote to production of improved varieties of black walnut for the planting of which millions of acres of the Central West are suitable.

Dr. W. C. Deming, secretary of the Northern Nut Growers Association, reports that a lot of his best trees at Georgetown, Conn., bore nuts this year, but the squirrels got most of them in his absence.

Walnuts were plentiful this fall in Miami county, Ohio; but the hickory crop was very small.

NORTHERN NUT GROWERS ASSOCIATION, INC.

AN ORGANIZATION for the improvement, cultivation and distribution of native nuts in the Northern United States and Canada. Through discovery, hybridization and experimental orchard tests it is producing choice named varieties of

PERSIAN WALNUTS
BLACK WALNUTS
HICKORY NUTS
BUTTERNUTS
CHESTNUTS
FILBERTS

Demand for these is greater than the supply. Members have expert advice on planting and care of nut orchards—sources of permanent production of high food value.

Fifteenth annual convention, New York City, Sept. 3-5, 1924.

Membership, including the Official Organ, American Nut Journal—\$5.00 per year.

H. J. Hilliard, Treasurer, Sound View, Conn.

In the Salem, Ore., District

United States Senator Chas. L. McNary is one of the pioneers of the filbert industry in the Salem, Oregon, district. Several years ago he saw the vision, and he made a study of the industry and wrote a series of articles concerning filbert growing that were published in The Statesman, and afterwards were issued in pamphlet form.

Senator McNary and W. T. Stolz of Salem have a farm on the bottom land north of Salem where they have a filbert grove that gives an example of what can be done with these nuts under the conditions existing in that section.

The beginnings of filbert interest in the Salem district are due partly to the enthusiasm and publicity of Senator McNary, and the present status of the industry shows that, if he did not build wiser than he knew, he certainly did build wiser than most of his neighbors knew.

It Pays to Advertise

"Please do not run our advertisement in the next issue as we are entirely sold out of our Nursery stock and inquiries are still coming in."—FLINT RIVER PECAN CO.

"Within the last two weeks I have received three answers to my advertisement of last spring. That proves that advertisements in the Journal have permanent value."—H. R. MOSNAT.

Nut Culture Information

Reprint folders on topics discussed in American Nut Journal. 10c Each.

CHESTNUT—

Breeding Chestnuts for Disease Control—U. S. Dept. Agr.
Purchase of Chestnut Tree With Reference to Blight—G. F. Gravatt.

FILBERT—

Establishing the Filbert Grove—George Dorris.
The Future of the American Grown Filbert—Richard H. Turk.
Hazel Blight—Dr. Robert T. Morris.
Sources of Supply of Hazel Nuts—Bulletin Imperial Institute.

PECAN—

Average Yield of Pecan Orchard in S. W. Georgia.
A Woman's Close Study of Pecans for the Table.
Co-operating in Marketing Pecans—William P. Bullard.
Cost and Development Pecan Unit Orchards—J. M. Patterson.
East Texans Reap Fortunes on Pecans.
Pecan Areas of the United States—M. P. Reed.
Pecan Orchard Instructions—C. A. Simpson.
Pecan Scab Experiments of 1922.
Pecan Rosette; Practical Treatment—W. A. Weaver.
Quick Results in Pollenizing Pecans—E. E. Risien.
Soil Fertility; Fertilizer Problems in Pecan Culture—J. J. Skinner.
Status of Pecan Industry—C. A. Reed, U. S. Nut Culturist.
Top-Working Northern Pecan Trees—J. F. Wilkinson.
\$2,000 an Acre by Top-working Pecan Trees—Stiles.
Why Pecan Trees Bear Alternate Years—C. A. Reed.

PINON NUT—

The Romance of the Pinon Nut Industry in New Mexico

WALNUT (BLACK)—

Black Walnut As a Meat Producer—Henry Stabler.
Improved Black Walnut a Good Investment—Henry Stabler.
The Lewis Hardy Black Walnut—H. R. Mosnat.
The Ubiquitous Black Walnut—T. P. Littlepage.

WALNUT (ENGLISH)—

English Walnut: Where To Plant It.
Franquette Walnut Orchard Pays Well—Turk.
Grafting, Budding, Topworking—Dr. W. C. Deming.
Some Walnut Varieties—Dr. L. D. Batchelor.
Top-Grafting the Walnut Tree—Ferd Groner.
Walnut Trees For New England—Dr. Robert T. Morris.

PROPAGATING—

Chip Buds For Nut Trees—Charles L. Edwards.
Grafting and Budding the Walnut—U. S. Dept. Agriculture.
Nut Tree Grafting by an Easy Method—Dr. Robert T. Morris.
Underworking Nut Trees—Charles L. Edwards.

MISCELLANEOUS—

Advent of Nuts as Staple Food—Dr. J. H. Kellogg.
American Nut Culture—24-page Pamphlet Survey.
American Nut Industry—C. A. Reed, Nut Culturist.
The Future of Nut Growing—Dr. Robert T. Morris.
How To Guard Against Faulty Nuts—Harvey C. Stiles.
List of Nut Trees for Northern Planting—W. G. Bixby.
Nut Trees for Highways and Public Places—W. S. Linton.
Nut Trees to Reduce Food Costs—Chas. Lathrop Pack.
Outline of Northern Nut Culture Activity—Dr. W. C. Deming.
Value of Nuts As Food—Dr. W. C. Deming.
What Nuts to Plant in Northern States.

AMERICAN FRUITS PUBLISHING CO., 39 State Street, Rochester, N. Y.

Big Business In Marketing Pecans

An Address of Highest Importance to Every Pecan
Grower, Delivered at Organization Meeting of
the Southern Pecan Growers Association in
Albany, Georgia, September 7, 1923

By CHARLES J. BRAND, Consulting Specialist, U. S. Dept. Agriculture

THIS Address, replete with practical information and full instructions for procedure to place the rapidly growing Pecan Industry on a sound business basis through systematic co-operative marketing, insuring highest regular permanent returns to the grower, in increasing ratio, will be published in succeeding issues of the

American Nut Journal

Official Journal of the
National Pecan Growers Association

Publication of the Address commenced in the November issue of the Journal and continues in the following issues. This Address should be read and re-read, studied in detail and kept on file by every Pecan Grower. Its author is a high authority on the subject. Under any other than Government auspices the advice in this Address would cost a large amount of money.

If not already a subscriber, send \$2.00 at once for the Official Journal (\$3.25 includes membership in the National Pecan Growers Association). Three years for \$5.00.

American Nut Journal Box 124 Rochester, N. Y.

NUT CRACKER PATENT AND PAT- TERNS EQUIPMENT

Ready to start manufacturing; price \$500. Address JAMES, 301 Brady Bldg., San Antonio, Texas.

AN UNUSUAL OPPORTUNITY To Purchase

ENGLISH WALNUT GROVE
In bearing. About 14 acres. Located in northwestern Pa.
EDWARD A. SELKIRK, Buffalo, N. Y.

PROFITABLE PECAN TREES

By careful methods of bud selection and culture we grow trees that yield Profitable Nut Crops. This fact is proven in our own large orchards and in the orchards of our customers. Our trees make satisfied customers.

We can supply all standard varieties. Make your reservations early to insure delivery when wanted.

Summit Nurseries

Monticello, Florida.

Have You Nuts to Sell?

HICKORY NUTS BLACK WALNUTS
BUTTERNUTS CHESTNUTS

Hundreds of buyers are asking where the nuts can be obtained in quantity. Place your Sale Advertisement in the **AMERICAN NUT JOURNAL** for quick returns. \$2.80 per inch.

39 State St., Rochester, N. Y.

If it relates to nut culture it should be in the **AMERICAN NUT JOURNAL**. Please send it in.

Manufacturers of all kinds of Barrels, especially for Pecans

PENSACOLA COOPERAGE CO.

PENSACOLA

FLORIDA

Albany Pecan Nut Exchange, Albany, Georgia

Now booking orders all varieties paper shell pecans S. A. P. Mail us list of your requirements-to-day, for fall delivery.

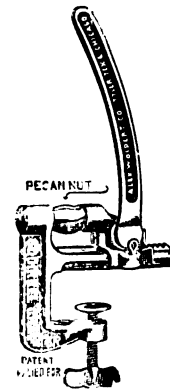
FOR SALE

5 ACRE PECAN GROVE LOCATED IN THE UNITED PECAN GROVES AT PUTNEY, GEORGIA. TREES PLANTED 9 YEARS AND IN GOOD CONDITION—UNDER CARE OF PAPER SHELL PECAN GROWERS ASSOCIATION.

PRICE, \$2,500—A BARGAIN FOR QUICK SALE. ADDRESS G. E. HADDEN, 6016 HAYES AVE., LOS ANGELES, CALIF.

FILBERT TREES

Barcelona
with pollinizer varieties
PEARCY BROS. NURSERY
SALEM, ORE.



Squirrel Nutcracker

BEST ON EARTH

Cracks the shell but not the kernel. Very simple; operates faster and better than any hand power nutcracker known.

Alex Woldert Co.,
TYLER, TEX.

BUDED and GRAFTED Nut Trees

Start right with my hardy Pennsylvania grown trees and be assured of success.

Attractive Catalogue Free. I have this season a fine lot of stake trained Pecan, English Walnut, Black Walnut and Persimmon trees budded on root pruned transplanted stocks, that will please you and that will transplant easily and safely. Write for catalogue.

J. F. JONES, The Nut Specialist
LANCASTER, PA.

SPRAYERS

FOR EVERY NEED

HIGH PRESSURE guaranteed

Ask for the **Ospraymo** Catalogue



Field
Force Pump
Co.

ELMIRA, N. Y.

N. J.—No. 1

BUDDY NUT

A cross between the Japan walnut and the American butternut. Grows as fast here as the Royal. Will do well on poor soil. Nut is like the butternut. Timber is valuable for cabinet work, etc. Bears when four and five years old. Wholesale price 6 ft. trees, \$50 per 100.

KESO NURSERIES, Clinton, Conn.

Budded and Grafted HARDY NORTHERN NUT TREES

Best varieties, grown in natural nut soil. Send for catalog. Have your seedling nut trees topworked to these fine varieties.

Information and estimate on request.

INDIANA NUT NURSERY
Rockport. J. F. Wilkinson, Prop. Indiana

Manual of WALNUT GRAFTING

The Biederman Method is fully described and illustrated. It is applicable to pecan, hickory and chestnut. Of special value in topworking, because it does away with use of ladders.

Price 75c per copy postpaid.

W. N. Y. PUBLISHING CO.,
BOX 124
Rochester, N. Y.

American Fruits Company's Library Opportunities

PRACTICAL BOOKS ON HORTICULTURE, NUT GROWING, NURSERY PRACTICE

Any of the following books will be sent on receipt of price by AMERICAN FRUITS PUB'G CO.,
123-125 Ellwanger & Barry Bldg., ROCHESTER, N. Y. Prices subject to change.

American Apple Orchard By F. A. Waugh.....\$1.90	Irrigation for the Orchard—Stewart 1.75	Plant Propagation; Greenhouse and Nursery Practice—M. G. Kains... 2.40
American Fruit Culturist By John J. Thomas..... 3.65	Land Drainage—Joseph H. Jeffrey.. 2.15	Plant Physiology—B. M. Duggar... 3.00
American Fruit Farm—F. N. Thorpe 2.65	Landscape Gardening—Downing's Famous Work—10th Edition— Revised by Waugh..... 6.00	Pomology, Text-book of—Gourley... 2.75
American Grape Culture—Munson.. 2.65	Landscape Gardening—House and Garden's Book of Gardens, 9½ x 12½, 400 Illustrations..... 5.15	Practical Forestry—A. S. Fuller... 2.15
American Grape Growing and Wine Making—George Husmann 2.15	Landscape Gardening Kemp—Re- vised by F. A. Waugh..... 2.15	Practical Fruit Grower—Maynard... 1.00
American Horticultural Manual By Budd-Hansen, two vols.... 3.30	Landscape Gardening—Maynard... 2.65	Practical Tree Repair—Peets..... 2.65
American Peach Orchard—Waugh.. 1.90	Landscape Gardening—The Small Place—By Elsa Rehmann..... 3.65	Principles of Agriculture—Bailey... 2.00
Bulbs and Tuberous-Rooted Plants.. 2.15	Landscape Gardening—Cridland... 2.65	Principles of Fruit Growing—Bailey 2.65
Bush Fruits—By F. W. Card..... 3.15	Landscape Gardening—The Com- plete Garden—Albert D. Taylor. 6.15	Principles of Pruning—Kains..... 2.65
California Fruits and How to Grow Them—E. J. Wickson, A. M.... 4.15	Landscape Gardening—O. C. Simonds 6.15	Productive Orchard—F. C. Sears... 2.65
Citrus Fruits—J. E. Colt..... 3.40	Making Horticulture Pay—Kains... 1.90	Pruning Manual—By L. H. Bailey... 2.00
Commercial Apple Industry of North America 3.65	Manual American Grape Growing— Hedrick 3.40	Putnam's Garden Hand Book..... 2.00
Cyclopedia of Hardy Fruits By U. P. Hedrick 6.20	Manual of Fruit Diseases—L. R. Hessler, H. H. Whetzel..... 3.15	Quince Culture—W. W. Meech..... 1.35
Dwarf Fruit Trees—Waugh..... 1.00	Manual of Fruit Insects—M. V. Slingerland, C. R. Crosby..... 3.90	How To Grow Roses—Robert Pyle.. 1.50
Farm Bureau Movement—O. M. Kille 2.15	Manual of Gardening—L. H. Bailey. 3.40	Rose—H. B. Ellwanger..... 1.40
Fertilizers and Crops By Dr. L. L. Van Slyke..... 3.40	Manual Tropical and Sub-tropical Fruits—Popenoe 3.90	Rose in America—McFarland..... 3.15
Fertilizers—Edward B. Voorhees... 2.65	Manual of Tree Diseases—Rankin... 3.40	Sales Promotion By Mail..... 2.15
Field Notes on Apple Culture By Dr. L. H. Bailey..... .90	Manual of Vegetable Garden Insects By Crosby & Leonard..... 2.90	Small Fruit Culturist—A. S. Fuller... 1.75
First Principles of Soil Fertility By Alfred Vivian..... 1.50	Manures and Fertilizers—Wheeler.. 2.65	Soils—E. W. Hilgard..... 4.25
Forests of N. Y. State—Recknagel.. 2.65	Modern Fruit Marketing—Brown... 1.90	Soils—Lyon-Fippin-Buckman 3.40
Fruit Growing in Arid Regions..... 2.75	Modern Propagation Tree Fruits— B. S. Brown..... 1.65	Soils—F. H. King..... 2.40
Fruit Garden—P. Barry..... 2.40	Nature's Garden—Neltje Blanchan.. 6.30	Soils—By Charles W. Burkett..... 1.90
Fruit Harvesting, Marketing—Waugh 1.90	Nursery Manual—Dr. L. H. Bailey... 2.65	Spraying Crops—C. M. Weed..... 1.00
Fruit Insects—Crosby..... 3.90	Natural Style Landscaping—Waugh 2.65	Standard Cyclopedia of Horticulture Edited by L. H. Bailey. In six vol- umes. 3,600 pages. 4,000 text engravings. 96 sepia halftones. 500 collaborators. May be had on installment payments..... 40.00
Fumigation Methods 1.90	Nut Cultivist—Andrew S. Fuller... 2.15	Strawberry in North America—S. W. Fletcher 1.90
Gardening for Pleasure—Henderson. 2.15	Nut Growing: Latest Information; Guide to Propagating—By Rob- ert T. Morris..... 2.65	Strawberry Growing—S. W. Fletcher 2.40
Gardening for Profit—Henderson... 2.15	Old Time Gardens—Alice M. Earle.. 2.65	Success in the Suburbs—John R. Mc- Mahon 2.15
Grape Growers Guide—Chorlton... 1.65	Ornamental Gardening—E. A. Long. 2.15	Successful Fruit Culture—Maynard 1.75
Greenhouse Construction—Taft..... 2.40	Principles of Floriculture..... 3.40	Surgeon's Philosophy—Dr. R. T. Morris 3.15
Greenhouse Management—Taft..... 2.40	Parsons on the Rose—Parsons..... 1.75	Systematic Pomology—Waugh..... 1.90
Hedges, Windbreaks, Shelter..... 1.00	Peach Culture—J. A. Fulton..... 1.65	Ten Acres Enough—L. P. Roberts... 1.75
Roses—How to Grow—Robert Pyle.. 1.50	Peach Growing—By H. P. Gould... 2.65	Wild Fruits, How to Know—Peterson 2.15
Injurious Insects—F. L. Washburn.. 2.65	Pear Culture for Profit—Quinn... 1.35	Wind and Weather—McAdie..... 1.40
Insects of Economic Importance— Herrick 2.15	Picturesque Gardens—Henderson... 2.25	
Insect Book—Dr. L. O. Howard..... 6.30	Plant Breeding—By Dr. L. H. Bailey 3.40	
Insects and Insecticides—Weed..... 2.15		
Insect Pests of Farm, Orchard and Garden—Sanderson and Peairs.. 4.65		
Insecticides and Fungicides..... 3.20		
Irrigation Farming—L. M. Wilcox... 2.40		

A paper which gives the best value for the money to the reader will give the best value to the advertiser as well. I don't think there is any argument about the soundness of this view.—H. Dumont, Chicago, Ill., in Printer's Ink.

WANTED Names and Addresses of Owners of Groves of Native Nut Trees in Northern States.

In the interest of Northern Nut Culture this Journal desires the above information to serve as a basis for extension of Nut Culture.

Readers will confer a favor by sending us lists of names and addresses of those who have stands of nut trees on their property, (with some account of productivity if practicable). Black walnut, English walnut, butternut, hickory, chestnut, filbert, etc.

American Nut Journal P.O. Box 124 Rochester, N. Y.

If it relates to nut culture it should be in the AMERICAN NUT JOURNAL. Please send it in.

AMERICAN NUT JOURNAL, the Official Journal, three years for \$5.00; twelve months, \$2.00; single copy 20c.

A NEW BOOK! NUT GROWING

By Robert T. Morris

The latest and only up to date book on the newest and one of the most important branches of Horticulture, giving a broad survey of a rapidly growing industry. Detailed explanation of successful methods of propagation and the new process of grafting with the use of paraffin; illustrated.

An invaluable work for all nut growers.

Price \$2.65, Postpaid

AMERICAN FRUITS PUB'G. CO.
39 State St., BOX 124, Rochester, N. Y.

The Logical Market Place for Sale of Nuts

The Advertising Columns of the American Nut Journal Chief Exponent of the Trade.

Hundreds of Readers of this Journal Ask for Pecan Nuts in Moderate Quantity at Prices Less Than the Retail Price per Pound in Northern Markets. They Would Be Eager Buyers if They Knew Where to Apply. If There is Any Surplus at Any Time, the Advertising Columns of this

Journal Will Dispose of It. Rate, \$2.80 per Inch. Announcement Should be Maintained the Year Around (Yearly Rate, less than 60 Cents per Inch a Week) to Secure Best Results. Make Your Name a Household Word Wherever Pecans Are Wanted. Make It Easy To Procure Them.

AMERICAN NUT JOURNAL

P. O. Box 124

ROCHESTER, N. Y.

American Nut Journal

**DEVOTED TO NUT GROWING INTERESTS
GENERALLY THROUGHOUT THE AMERICAS**

Vol. XIX. No. 6

DECEMBER, 1923

Per Copy 20c.

HOW SOON WILL BLACK WALNUTS BEAR?



Black walnut tree bearing seven nuts at only seventeen months old from the graft. In the Nursery of J. F. Wilkinson, Rockport, Indiana.—See page 111.

39 STATE ST.



ROCHESTER, N. Y.

American Fruits Publishing Co.

Of Special Interest to the American Nursery Trade

The Whole Subject of Nursery Trade Publicity

By a system exclusively its own, this publishing company covers the American Nursery Trade thoroughly. Advertisements intrusted to its care are published first in the "American Nurseryman," through which they reach subscribers, and then are published in the "American Nursery Trade Bulletin" through which they reach the remainder of the trade. The rate for advertisements covers the double service, on the 1st and 15th each month. Forms close on the 25th.

BETTER THAN ANY TRADE DIRECTORY—Mailing Lists changed daily.

American Nurseryman and American Nursery Trade Bulletin

ALL ADVERTISEMENTS ARE RUN IN BOTH PUBLICATIONS
ABSOLUTELY COVERING THE TRADE

FOR THOSE WHO DO NOT ALREADY KNOW

BUSINESS Announcements in this Chief Exponent of the Trade reach the Nurserymen of every State in the Union. An absolutely independent publication. Edited by the Founder and Dean of Nursery Trade Journalism in America, it continues its pronounced lead in movements which have characterized trade progress for a quarter of a century. Practically every important action on the part of Nursery organizations of the country, national, district and state, has been urged and foreshadowed in the columns of the "American Nurseryman" for months or years beforehand.

That is an unparalleled record. The proof is in print in the files of this journal, open to all.

THE AMERICAN NURSERYMAN, 30 State Street, ROCHESTER, N. Y.

Advtg. \$2.80 Inch CHIEF EXPONENT OF THE NURSERY TRADE Subn. \$2.00 Year
American Nurseryman Advt. are included in American Nursery Trade Bulletin Monthly

TRADE SENTIMENT

A letter recently received from President Robert Pyle of the Conard & Jones Company says: "Your recent issue serves to reinforce a conviction that has been growing with me that you are alive to the interests of the Nurserymen and sensitive to their needs. I want you to know that some of us appreciate the fact that we have a Trade Journal which may be counted upon to help boost the movements that are for the betterment of the industry generally."

The D. H. L. Nursery Company in a recent letter said: "I am more than ever convinced that the 'American Nurseryman,' being an independent Trade Journal, is a logical medium which should be dominant in the Nursery Field."

"Your publication is doing a great work. We are all with you."—John A. Young, President, Aurora (Illinois) Nurseries.

Subscription: \$2.00 per year. Three Years. \$5.00

AMERICAN FRUITS PUBLISHING CO.,
30 State St., ROCHESTER, N. Y.

While planting nut trees and getting them established is more difficult than in the case of fruit trees, yet it must not be understood that it is so difficult that few can succeed. Anyone, who plants the right kind of nut trees, in good soil, and gives them proper attention till they become established will have something that will not only be a source of pleasure but a source of constantly increasing income. The English walnut, hazel and almond orchards of Europe and California and the pecan orchards of Southern United States have amply demonstrated this for these sections, and the nut trees planted in the north which are just coming into bearing have convinced careful observers that the fine nut trees in the north will do likewise. Therefore the Association wishes to emphasize that the important thing to do now is to PLANT THE FINE VARIETIES OF NUT TREES THAT WE NOW HAVE.

All Advertisements in the AMERICAN NUT JOURNAL
Are Reproduced Gratis in AMERICAN NUT TRADE BULLETIN

CONSULTING TROPICAL HORTICULTURIST and TREE EXPERT

HARVEY C. STILES

CHOCOLATE BAYOU, TEXAS

Specializing in Pecans, Grapefruit, Avocados, and Landscape Development, Long experienced for—and present active director of—many such large projects throughout tropics and semi-tropics. Examinations, Reports, Plans, Specifications and Estimates. Correspondence suggested.

Texas Pecan Nursery ARP, TEXAS

THE PEOPLE THAT GROW
WELL-ROOTED PECAN TREES

THIS SPACE

\$2.50 Per Month Under Yearly Contract

Under less than yearly term:
\$2.80 Per Month

Manual of

WALNUT GRAFTING

The Biederman Method is fully described and illustrated. It is applicable to pecan, hickory and chestnut. Of special value in topworking, because it does away with use of ladder. Paper; 6x3½; pp. 20. Price 75c per copy postpaid.

W. N. Y. PUBLISHING CO.,
BOX 124
Rochester, N. Y.

PECANS

We are the pioneer growers of budded and grafted pecans in the South. Have a complete stock of the leading standard varieties. Can furnish trees we know will please and give satisfactory results. Catalog free.

INTERSTATE NURSERIES

C. M. Griffing & Co. Props., Jacksonville, Fla.

If it relates to nut culture it should be in the AMERICAN NUT JOURNAL. Please send it in.

ALL INTERESTS CO-OPERATING

ATENTION to the mutual interests in the Nut Industry is succinctly directed by Manager T. C. Tucker of the California Almond Growers Exchange: "We are a strictly co-operative organization, including Grower, Broker, Wholesaler and Retailer"

This may be said also of organized effort in the production and distribution of Walnuts and Pecans, each of which is represented in Associations.

It is because of this co-operative feature that the American Nut Journal combines the news of the Nut Industry in the fields of Production and Distribution. Its Market and Crop Reports will be of increasing value.

It is of prime importance that the market shall be supplied; a supply is the basis upon which a market exists.

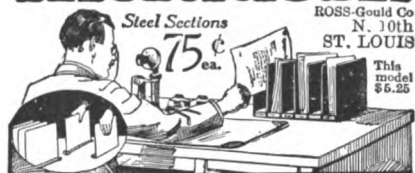
It is also of prime importance that a market be created and maintained; distribution of the product is what makes the industry.

The Journal desires to co-operate heartily with producer and distributor, and to that end welcomes frequent communications by way of comment on current events, personal mention, trade news and suggestions. It is the logical medium for interchange of trade comment and the recording of trade activities.

Send for FREE story

Interesting, illustrated folder "How to get Greater Desk Efficiency" shows how to keep your desk cleared for action. Thousands of Kleradesks are giving entire satisfaction. Saves time locating, distributing or sorting papers. Takes less space than a tray. Sent FREE trial.

Kleradesk



Free Mailing Lists

Will help you increase sales. Send for FREE catalog showing details covering names of your list prospective customers. Counts and prices are given on thousands of different Mailing Lists. 99% Guaranteed 5¢ each by refund of 10th Street St. Louis

Have You Nuts to Sell?

HICKORY NUTS BLACK WALNUTS
BUTTERNUTS CHESTNUTS

Hundreds of buyers are asking where the nuts can be obtained in quantity. Place your Sale Advertisement in the AMERICAN NUT JOURNAL for quick returns \$2.80 per inch.

39 State St., Rochester, N. Y.

AMERICAN NUT JOURNAL, the Official Journal, three years for \$5.00; twelve months, \$2.00; single copy 20c.

All Advertisements in the AMERICAN NUT JOURNAL Are Reproduced Without Charge in the AMERICAN NUT TRADE BULLETIN.

AMERICAN NUT JOURNAL --- DECEMBER, 1923

EDITORIAL DEPARTMENT—Communications on any subject connected with Nut Growing and Distribution are cordially invited by the editor; also articles on this subject. We shall be pleased to reproduce photographs of trees of interest, methods and scenes connected with the Nut Industry; portraits of individuals, etc. Suggestions are cordially welcomed.

ADVERTISING—Advertising forms close on the 10th of each month. If proofs are wanted, copy should be in hand on the 1st. Advertising rate: 20 cents per square line; \$2.50 per column inch for any amount of space; \$2.50 per inch under yearly contract.

Advertisements that do not represent reliable concerns will not be accepted.

SUBSCRIPTIONS—The "American Nut Journal" will be sent to any address in the United States for \$2.00 a year; to Canada or abroad for \$2.50 a year. Three years: In United States, \$5.00; Canada, \$6.50.

Single copies of current volume, 20c; of previous volumes, 25c.

WHAT THIS JOURNAL STANDS FOR—Reliable information on all phases of the Nut Industry. It is for the advancement of Nut Growing in general; it is in no way confined to the interests of a particular kind of nuts, nor of a particular section. It is broad in scope and absolutely independent. The aim of "The American Nut Journal" is to stimulate thousands of persons into developing interest in one of the greatest food supplies of the future—to line the roadsides and fill the waste places with trees of a sort which yield dollars worth of fruit every year instead of the mere bunches of leaves resulting from present shade and ornamental planting. At the same time it will record the progress of the industry, the latest descriptions in the note book of the biologist and plant physiologist, the rapidly expanding knowledge of methods, the increasing acreage, and in short the news as it develops of an industry whose importance is recognized by an increasing number of persons in all sections.

Entered as second-class mail matter June 6, 1914, at the post office at Rochester, N. Y., under the Act of March 3, 1879.

AMERICAN FRUITS PUBLISHING COMPANY INC.

Ralph T. Olcott, Editor and Manager

121-123-125 Ellwanger & Barry Bldg., Rochester, N. Y.

Classified Business Announcements In This Issue.

Albany Pecan Nut Exchange Marketing of Pecans.....	119	Northern Nuts	Sources Wanted	116
Bassett, W. W.....	Pecan Trees	"Nut Growing"	New Book	116
Bechtel's Pecan Nurseries...	Grafted Pecan Trees.....	Nuts as Staple Food.....	Dr. J. H. Kellogg.....	118
Field Force Pump Co.....	Sprayers	"Nut Trees for the North"...	Expert Advice	118
Florida Nurseries	Pecan Trees	Pensacola Cooperage Co....	Pecan Barrels	115
Hadden, G. E.....	Pecan Grove for Sale.....	Ross-Gould Letter Co.	Trade Lists	102
Horticulturists, Inc.....	Southern Pecan Experts.....	Simpson Nursery Co.....	High Grade Pecan Trees.....	115
Indiana Nut Nursery.....	Northern Pecan Trees.....	Southern Nut Trees Nurs...	Pecan Trees	115
Interstate Nurseries	Pecan Trees	Stone, B. W.	Pecan Trees, Nuts, Groves.....	115
Jones, J. F.....	Grafted Pecan Trees.....	Stiles, Harvey C.....	Tree Expert	102
Lancaster Nut Nurseries....	Northern Nut Trees.....	Summit Nurseries	High Grade Pecan Trees	115
Logical Market Place.....	For Selling Nuts.....	Texas Pecan Nursery.....	Well Rooted Pecan Trees.....	102
Manual of Grafting.....	Biederman Method	Wilkinson, J. F.	Grafted Pecan Trees.....	115
Monticello Nursery Co.....	Budded and Grafted Pecan Trees.....	Woldert Co., Alex.....	Squirrel Nut Cracker.....	115

IMPORTS OF NUTS INTO THE UNITED STATES, FOR CONSUMPTION, DURING THE LAST THIRTEEN YEARS (Compiled by Bureau of Commerce and Navigation, Department of Commerce, Especially for the "American Nut Journal")

KIND	1909	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919	1920	1921
Almonds—not shelled.....lbs.	2,120,632	6,810,066	3,762,654	5,242,563	2,363,860	5,501,059	4,684,598	2,368,369	4,901,168	6,149,374	7,482,538	6,460,732	5,068,215
Shelled.....lbs.	8,538,051	10,485,750	12,160,636	11,682,988	12,655,057	13,896,621	12,168,153	13,210,668	19,180,258	21,544,757	25,007,908	18,789,626	21,573,634
Apricots and peach kernels lb.	27,854	13,531	7,939	18,769	18,572	67,164	11,926	250,075	11,926	250,075	11,926	65,175	32,986
Coconuts in the shell.....Dollars	\$1,246,463	\$1,296,970	\$1,704,262	\$2,012,203	\$1,793,713	\$2,150,500	\$1,593,686	\$1,891,328	\$2,583,560	\$2,490,366	\$4,063,282	\$4,230,231	\$2,263,060
Coconut Meat broken or Copra not shredded, desiccated or prepared.....lbs.	23,742,518	20,830,539	38,081,984	64,505,787	54,283,592	44,459,158	88,690,382	106,507,765	247,043,127	430,649,332	268,637,781	215,186,461	189,320,850
Desiccated, shredded, cut or similarly prepared.....lbs.	5,461,602	5,985,308	6,681,850	5,398,465	6,826,095	9,307,924	5,866,806	7,917,380	10,491,796	20,269,909	29,637,674	30,631,029	35,633,497
Cream and Brazil.....bu.	409,644	461,496	277,679	21,601,008	11,833,139	11,431,531	21,483,319	21,483,319	21,483,319	21,483,319	21,483,319	21,483,319	21,483,319
Filberts—not shelled.....lbs.	7,365,837	10,026,961	10,084,987	8,375,860	8,596,278	10,36,072	10,922,248	10,003,552	16,468,547	7,432,524	16,747,349	14,665,364	14,082,336
Shelled.....lbs.	1,384,689	1,413,391	2,332,606	1,368,835	1,450,620	1,798,147	1,722,705	1,259,540	2,280,757	4,245,863	3,778,906	4,711,293	4,233,107
Marrons, crude.....lbs.	10,270,398	9,968,879	14,845,345	10,157,321	18,849,257	12,549,959	15,754,796	6,275,030	5,021,146	29,484,637	23,340,886	13,264,069	13,264,069
Olive nuts, ground.....Dollars	\$590	\$478	\$236	\$206	\$385	\$25	\$112	\$420	\$132	\$132	\$132	\$132	\$132
Palm and Palm Nut Kernels "Peanuts or Ground Beans....."	\$2,752	\$6,907	\$5,744	\$7,970	\$4,572	\$21,127	\$31,900	\$1,104,885	\$626,435	\$16,906,313	\$5,610,056	\$8,329,034	\$280,194
Unshelled.....lbs.	7,326,371	11,297,172	11,055,823	12,680,433	12,140,612	17,298,778	14,075,387	9,623,411	7,710,082	1,970,797	5,667,354	7,222,486	4,803,677
Shelled.....lbs.	1,302,919	16,089,919	7,821,505	3,127,829	7,823,173	21,819,101	11,685,507	19,739,888	27,548,928	67,746,831	24,179,687	103,562,486	30,406,853
Pecans.....lbs.	1,480,289	3,349,460	2,333,037	2,607,227	1,903,434	2,621,161	2,032,539	1,285,382	4,076,833	3,304,003	21,235,078	17,339,096	31,821,639
Walnuts—not shelled.....lbs.	17,432,885	23,269,974	21,146,116	22,208,845	16,363,046	16,134,211	20,988,326	22,610,418	17,177,992	9,707,401	10,260,899	13,972,917	18,264,069
Shelled.....lbs.	8,781,908	10,960,988	11,244,054	10,713,286	10,093,622	11,636,053	10,552,956	13,445,790	12,257,593	9,707,401	10,260,899	13,972,917	18,264,069
All other shelled or unshelled, not specially listed.....lbs.	9,938,337	3,584,544	2,962,663	3,060,989	3,600,068	7,426,313	3,272,492	2,772,589	2,769,634	49,930,283	\$17,499,009	\$68,752,801	\$37,378,572
Total of nuts imported Dollars	\$8,519,987	\$19,775,196	\$14,985,579	\$15,696,185	\$13,509,307	\$19,815,713	\$16,865,244	\$20,594,434	\$33,687,608	\$49,930,283	\$17,499,009	\$68,752,801	\$37,378,572

Contents of Three Preceding Issues of the "AMERICAN NUT JOURNAL"

SEPTEMBER 1923	OCTOBER 1923	NOVEMBER 1923
Planting and Care of Pecan Orchard By C. A. Simpson.....	Northern Nut Growers Convention.....	Co-operative Pecan Marketing By Charles J. Brand.....
44	64	84
Million Pecan Trees for N. C.....	Nuts for the Northern States.....	Best Legumes for Pecan Groves By B. W. Stone.....
45	64	86
Georgia Opportunities Unsurpassed.....	Commercial Culture of Black Walnut By T. P. Littlepage.....	Virtues of the Halbert Pecan By the Originator.....
47	64	87
Iowa Exhibit of Edible Nuts.....	New Methods of Nut Grafting By Dr. Robert T. Morris.....	World's Largest Pecan Tree By A. W. Woodruff.....
46	65	88
Mexican Pecan Conditions.....	National Pecan Growers Convention.....	What the Future Holds for Pecans By L. A. Niven.....
49	66	89
Curly Grain Black Walnut.....	High Records in Pecan Production.....	Why Some Pecan Trees Do Not Bear By Harvey C. Stiles.....
49	66	91
An Enormous Power Plant.....	Value of Pecans in the Diet.....	Advice from Oldest Living Pecan Grower By Sam H. James.....
50	67	93
Practical Questions in Nut Culture.....	Symposium on Co-operative Marketing.....	Oklahoma Pecan Growers Association By C. E. Ringer.....
51	67	92
Awakening the Slumbering Public.....	Experts Cite Best Pecan Varieties.....	Filberts and Walnuts in Northwest By Richard A. Turk.....
51	68	96
Numbering System for Pecan Orchards.....	President Simpson's Address.....	The Slow Growing Pinon Tree.....
53	69	91
Study of Variations in Pecans.....	Developing a Pecan Orchard By J. B. Wight.....	Crop and Market Reports.....
52	71	94
English Walnuts in the North.....	Notes from Experimental Nut Orchard.....	
52	72	
Wholesale Cracking of Black Walnuts.....	Nursery Grown Trees for Roadsides.....	
58	72	
What Can Be Done in Michigan.....	Conditions in the Albany District.....	
58	75	
Strong Demand for Nut Trees.....	Southern Pecan Growers Association.....	
59	77	
What Co-operative Marketing Does.....	Raising Pecans Is Profitable.....	
59	78	
Pacific Coast Walnuts in a Nut.....	Crop and Market Reports.....	
58	76	
Co-operative Pecan Marketing.....		
50		
Crop and Market Reports.....		
54		

CO-OPERATION IN THE MARKETING OF PECANS

ADDRESS BY CHARLES J. BRAND, CONSULTING SPECIALIST IN MARKETING, U. S. DEPARTMENT OF AGRICULTURE, AT ORGANIZATION MEETING OF THE SOUTHERN PECAN GROWERS ASSOCIATION, IN ALBANY, GA., SEPT. 7, 1923

Two Outstandingly Successful Nut Marketing Co-operative Agencies Competitive With the Product of the Pecan Growers—Same Channels of Distribution—Methods of Procedure of These Organizations Described in Detail—Questions of Operation, Shipping, Financing, Standardization, Grading, By-products—Valuable Experience by Which Pecan Growers May Profit Directly

(Continued from November Issue)

THERE are two outstandingly successful nut marketing co-operative agencies in the United States; the California Walnut Growers' Association with headquarters at Los Angeles, and the California Almond Growers' Exchange with headquarters at San Francisco. From the experience of these two bodies, I am confident that the pecan growers can learn more than from any other co-operative enterprise in existence. Furthermore, your product is competitive with the product of these associations. You will find yourself confronted with the necessity of using the same channels of distribution. In some cases, indeed, your product will be sold in the markets by the same brokers and wholesalers who handle the almonds and walnuts of California. You are fortunate in not having the direct competition in the pecan field that the California producers are compelled to meet.

At the risk of being a little tedious, I propose to describe to some extent the methods of procedure of both of these organizations.

CALIFORNIA WALNUT GROWERS' ASSOCIATION

This co-operative marketing association was organized under the Civil Code of California, which permits growers engaged in the production, packing, or marketing of horticultural products to form a non-profit co-operative association.

When the already existing pecan exchange was formed, the Clayton Anti-trust law had just passed and there was a great interest in the exemption it conferred. My recollection is not now clear whether the laws of the State of Georgia were then or are now such as to permit the formation of an exempt association.

The Walnut Growers operate at cost and without profit except as the profits accrue directly to the grower. The Association sells all of the walnuts produced by more than 4,200 growers, who make 82% of the walnut crop grown in California.

Being purely a sales organization, the Association does not contract directly with the growers. There are 42 local associations, comprised of growers in the important walnut producing sections. The federation of these locals constitutes the membership of the California Walnut Growers' Association.

The Association does not operate sales' old. The gentleman who is its President, Mr. Charles Teague, is also President of the California Fruit Growers' Exchange. Mr. Carlyle Thorpe, its able general manager, has been in charge of the business practically from the beginning. I am indebted to him and his able assistant, Mr.

Claude Payne, for much of the information in this part of my address. Mr. Thorpe particularly has been an important element in the success of the Walnut Association. His clear view of the whole field of co-operative effort, his intimate knowledge of how to conduct a co-operative organization, and his high standing with the trade in all of the consuming centers, point the way to other associations in the selection of a type of manager who can not only weld the growers together but who can command the confidence, respect and support of the distributing trade.

The local associations of the California



CHARLES J. BRAND, Washington, D. C.
Consulting Specialist in Marketing,
U. S. Department of Agriculture

Walnut Growers' Association are corporations formed either with or without capital stock, as the California law permits either method. In each case, however, the purpose of the local association is the same, namely, to provide facilities whereby the walnuts of the growers may be received, graded, packed, shipped or marketed by the local association on a cost basis and through the marketing facilities furnished by the central association.

The Board of Directors of the Association is comprised of one elected director from the membership of each local association.

OPERATION METHODS

The Association does not operate sales' offices under its own ownership and management. Sales are made to the wholesale trade through merchandise brokers. The territories of these representatives are carefully outlined by the Association's sales department and only with a definite under-

standing is one broker permitted to operate in the same territory as another.

Accurate records are kept showing annual sales in each representative's territory. This enables the sales department to obtain the maximum efficiency in securing distribution, and when efficiency is not secured it enables the department to locate weaknesses and under-distribution and to correct them.

Formerly the Association sold its walnuts under a plan involving a binding future contract. This method has been abandoned. A plan has been substituted whereby "memorandum orders" are accepted by the brokerage representative in the markets from the jobbers in their territory during the summer and early fall months. The broker retains possession of these memorandum orders. As they are not confined, no actual sales are made until later when the opening prices for the season are named by the Association.

About six weeks before harvest time the Association, after making careful estimates of the crop, both as to total amount and amounts of the different varieties and grades, makes allotments to each broker for the trade in his territory. These allotments are based not only upon the expected crop but upon the past performance of the broker and the estimated requirements of his territory.

The broker in his turn applies the allotment made to him to the memorandum orders which he has retained on file and makes new sales from any surplus that may remain after his orders have been filled.

The first shipments of walnuts are usually made around the first of October. When they are ready to go forward, the Association announces the opening prices. The trade is allowed 72 hours in which to confirm the memorandum orders that have been placed with the brokers. When these confirmations are received by the broker, he wires them to the Association and properly executed contracts are then forwarded to each buyer. This method brings a maximum number of orders into the Association's hands at one time so that it is practical to consolidate smaller orders for carlot shipments, thus obtaining the advantage of lower freight rates and in many other ways facilitating the work of the local association and the central body in distributing the crop.

SHIPPING AND FINANCING

During the shipping season the shipping department of the Association keeps in close communication with the local associations by telegraph and long distance telephone, so that it knows at all times the stock on hand available for shipment.

Before a shipment can be made it must

be thoroughly inspected to insure delivery to the buyer of the particular quality of walnuts specified in the contract with him. This important work is done by the inspection department of the Association which keeps in touch with the local associations and examines each shipment through one of its inspectors prior to its going forward.

Samples are drawn from each bag to determine the quality, size and appearance of the nuts after bleaching. Cracking tests are made of representative samples and if the shipment passes the standard established by the Board of Directors of the Association an inspection certificate is issued to the local association manager which constitutes his permit to roll the car on the order of the shipping department.

When the local association manager receives the bill of lading and inspector's certificate, he forwards these with a bill for the value of the shipment to the head office in Los Angeles. Upon receipt of the documents, this office immediately invoices the shipment and draws a draft on the buyer, with bill of lading or delivery order attached. One per cent is allowed if the draft is paid within three days from the date of presentation, or net on arrival and examination of car. The drafts are deposited for collection with the Association's bank in Los Angeles.

So long and so satisfactory have been the relationships, not only between the Walnut Association and its bank but many other of the California organizations, that the banks give the Association credit as cash for the full face value of the draft, in some cases charging a modest rate of interest to the date of collection. After this, the Association immediately sends its check for 90% of the f. o. b. value of the shipment to the local association. The local association deducts the amount of its operating expenses and distributes the balance of the proceeds to the growers.

A surplus of 10% reserved by the California Walnut Growers' Association on all shipments provides the funds for the operation of the central body. After the close of the first pool, which takes place November 20, the balance is returned to the associations and by them to their growers pro rata.

Approximately 97% of the entire tonnage of the Association is usually shipped under the first pool. The Association does not in any case borrow money to make advances to the local associations prior to the shipping period. If the grower requires funds for his operations he either arranges to finance himself in the usual way or secures assistance from his local association.

The association's sales and other expenses for the marketing of the 1922 crop were 5½% of the f. o. b. value of the product. The expenses in detail were classified as follows:

Advertising	2¼%
Cash discount	1%
Brokerage paid to Association's sales representative	1½%
Interest, rent, salaries, inspection, legal, legislative, growers' services, field work allowances, shrinkage, and all other expenses	¾%
Total	5½%

The Association's advertising is handled through a well known advertising agency, and an advertising department is also maintained to handle all business with the agency.

Approximately 60% of the Association's advertising appropriation is spent for nation-

al magazine advertising, 20% for poster space and material, and the balance for recipe books, dealer' helps, broadsides, and other methods. All details for advertising campaigns are worked out in advance by the management and the advertising department and are then submitted to the Board of Directors for approval.

Approximately ¼c per pound on the estimated tonnage to be shipped for the season is set aside for the advertising appropriation.

As nut growers, most of you are familiar with the excellence of the advertising material that has been put out by the Walnut Growers. It has been one of the most important elements in their success in handling the crops of its growers.

When the Association was organized each of the locals had its own house brand. Almost immediately after the Association was created in 1912 it was found necessary to discontinue them. As a matter of policy it was decided to apply the name "Diamond" brand to cover all walnuts that came above a certain specified quality. After the product is cured, bleached and packed, it is put in branded bags so that all walnuts up to the standard quality can be readily identified.

The Association is endeavoring to bring about the invention of a machine that will place the Diamond mark on each individual nut, feeling this will be a big asset and selling point.

STANDARDIZATION AND GRADING

This is one of the most important questions of all in the marketing of any agricultural product. The problems are so different with each crop that it is not possible to lay down hard and fast rules that will fit all. Over a hundred years of cotton growing have resulted in a most intricate but still practical and successful system of grading cotton, not only as to the amount of varying material contained but to the length of staple, color, strength, and other characters. Wheat grading has been worked out to almost a similar or even greater degree of perfection. Wool, apples, potatoes, and other products have had suitable systems of grading devised for them.

The problem of the walnut growers as to grades and standards is not as complex as is that of the pecan grower. This is due largely to the fact that there is a relatively small number of important commercial varieties of walnuts and the differences between them are not so great as in the case of pecans. This again is due to the fact that walnuts have been the subject of the attention of expert horticulturists for centuries, while the pecan as a cultivated crop has come into use within the memory of most of us. In fact, while wild pecans had been marketed in small amounts for many years, it was not until between 1870 and 1880 that commercial quantities began to appear in the market and a regular trade was built up.

The wide difference between improved budded varieties and between the wild seedling varieties make the problem of growing pecans more like that of growing apples than any other product that occurs to me offhand.

In the case of the Walnut Association just prior to harvest when the nuts have about reached maturity, samples are gathered from each local association district. A committee on standardization is appointed to test these samples for quality and report its findings to the Board of Directors at a meeting called for the purpose of naming prices. The committee, after carefully investigating makes a recommend-

ation as to the quality standards to be shipped for the shipping season. The mere statement of this procedure suggests the possibility of greater diversification in the quality standards from year to year than actually exists. The trade is very exacting. It must be pleased. It insists on having good nuts from year to year. If the quality standard is set too low, there is immediate complaint with disastrous results in the marketing of the crop.

To bring the walnuts up to the quality standard the local packing houses are equipped with specially designed and patented machines that remove all blanks and light weight nuts. The 1922 cracking standards for the two principal varieties, Santa Barbara Soft Shells and the Placencia Perfection, shipped under the Diamond brand were guaranteed to crack 88% to 90% respectively of edible meats.

The nuts were graded according to size by means of revolving cylinder graders. These graders are ten feet long and 40 inches in diameter, covered with screens. Two types of machines are used, a square machine and a slot machine, the latter being adapted to nuts of the oblong type.

In determining the various grades, the grade descriptions specify the size of machine to be used. For example, the "No. 1 soft shell" grade are those nuts of the seedling variety that will not pass through a one inch square opening. For securing the above size the grading machines are built with 1 1/32 inch square opening instead of 1 inch square opening.

BY-PRODUCTS

As is the case with your own product, there is a certain percentage of walnuts that do not come up to the quality standard on account of imperfect shape, shrivel, or other conditions. These nuts are removed by the local association and are shipped to one of the central associations' repacking plants where they are cracked by machinery, hand sorted, and marketed as shelled walnuts. The Los Angeles cracking plant is by far the largest of its kind in the world. It has specially devised and patented cracking machines and at the height of the season employs over 700 women in sorting and grading the nuts after they have been cracked and shelled. Walnuts then go through the cleaning machines where all foreign material is removed and are then packed in fibre containers of 25 pounds each for the bakery and confectionery trade.

A large quantity of shelled walnuts is also packed in vacuum in tins. This method of packing by removing the air, with the opportunity for bacteria to operate which takes place in the presence of air, insures to a high degree the keeping quality of the nut meats through the summer months. [To be continued]

Gulf Coast Pecan Association

The pecan growers of Ocean Springs, Miss., last month met at the home of Theo. Bechtel and organized the Gulf Coast Pecan Growers' Association. The following pledged membership: Charles E. Clark, L. V. May, L. J. B. Mestier, I. F. Pritchard, J. P. Edwards, Theo. Bechtel, Mrs. C. F. White, Albert Ackander, R. P. Barnhart, J. C. Wright, Mrs. Joseph B. Garrard, Gus R. Nelson, E. B. Duschette, H. L. Girot and Tom Chase. I. F. Pritchard was elected president. The membership is open to all pecan growers on the gulf coast of Texas, Louisiana, Mississippi and Alabama.

In the near future the association hopes to build a warehouse and market its products in a co-operative way.

A FORTUNE WITHIN THE REACH OF ALL

Borne on the Limbs of the State Tree of Texas—The Best of all Shell Goods Except the Egg—State Is Neglecting an Industry Which Might Rival Other Natural Products—Pecans Moving in Carlots But 500,000,000 Pecan Trees Are Not Bearing Because of Neglect—Possibilities of Pecan Culture Unlimited—Supply Will Not Equal the Demand in Two Hundred Years.

By J. H. Burkett, State Nut Specialist, Austin, Tex.

THE best of all shell goods except the egg is the pecan.

A fortune borne on the limbs of the state tree of Texas lies within reach of all who wish to give attention.

The State of Texas, leading pecan producing state in the only country in the world producing the pecan in considerable quantity, is permitting at least half its great number of pecan trees to go barren and is neglecting an industry that might be made to rival its other natural products of oil, gas, cattle and cotton.

Pecans are now moving to the market by the hundreds of car loads, but there nevertheless are something like five million trees in the state that do not bear because they have been neglected.

Thousands of native pecan trees have been cut down in the process of clearing the land for cotton and other crops, and in many cases the trees left standing have no care whatever.

The waste that has been going on in the past is appalling.

There are approximately ten million native trees in the state, with an annual production of 365 carloads averaging 30,000 pounds to the car. The annual crop brings over a million and half dollars to the pockets of Texas farmers.

Pecan trees are to be found growing wild along the river banks of the state, from the Red River on the north and northeast to the Nueces and Devil's River and their tributaries near the southwestern border. These trees live to be hundreds of years old and under proper conditions bear abundantly each year. However, as a whole, it has been observed that there is usually one good crop of pecans every three years; one good crop being followed by a fair one, and that in turn by an almost failure. Every fifteen years or so there is a bumper crop when every pecan tree, from the tiny young tree to the most hoary veteran of centuries old, bears a crop.

The possibilities of the pecan industry are almost unlimited. From the present demand and the fact that little has been done to introduce them in the markets of the North and East, as well as abroad, it would seem that it would be impossible to produce too many pecans. The United States is the only pecan growing country in the world and even after the markets of this country are supplied, we have the rest of the civilized world as a potential market. It is a conservative estimate that the supply will not equal the demand for at least 200 years.

Nut Growing in the Central West

The Thomas walnut was originated in Chester County, Pa. I procured a grafted tree some 20 years ago. Finding it was an exceptionally good nut, I propagated and planted some in waste land, also top-worked some wild trees, so that now I have about 75 trees. The nut is thin-shelled, with large meats that come out nicely when cracked, giving 10 lbs. of meats to the bushel. I sold last season's crop at \$4 per bu. The largest part, however, we cracked and sold to dealers at \$1 per lb., they selling at \$1.25 to \$1.35 per lb. These were so good that the demand was so great that we could not

Southern Pecan Growers Association

The executive committee of the Southern Pecan Growers Association met at the Albany, Ga., headquarters Nov. 27. President R. B. Small, Macon, Ga.; Secretary, Harry U. Jackson, Baconton, Ga.; H. K. Miller, Monticello, Fla.; B. W. Stone, Thomasville, Ga.; J. M. Patterson, Putney, Ga., and P. J. Brown, Albany, Ga.; were present.

"The Association has found a widespread demand for papershell pacans this season and has filled orders as far west as Washington state, and in many of the leading cities of the East and Middle West," said President Small. "There is such an insistent demand for pecans that the possibility of oversupplying the market is remote. I have been asked if there is danger of having too many pecans. There are 100,000,000 people in the United States, and if you gave them only one pound a year apiece, it would require 100,000,000 pounds of pecans to supply them. The demand is increasing each year, and people are becoming more and more educated to the food value, the deliciousness and the economy of pecans. It will be years before there is danger of oversupplying, if the marketing is handled in a way to secure proper distribution, such as this exchange is seeking.

"Members of the Southern Pecan Growers Exchange have been well pleased with the results of their organization. Very favorable prices have been secured for pecans sold thus far. Advances of 50 per cent are being made to the members as fast as their pecans are delivered, and the utmost loyalty is characterizing their actions in the matter of deliveries.

"Indications are that there will be a big sign-up of new members next year."

Secretary Jackson said: "Nuts have been received from four states, Georgia, Florida, Alabama and Mississippi, and inquiries have been received from states more distant than Mississippi, sent by growers who are anxious to become members and market their nuts through this association.

Much of the success thus far has been due to the fine degree of co-operation given by the directors. Every director is working for the Association and the finest spirit of co-operation has been shown by every one. I recently made a talk at Tifton to a joint meeting of the civic clubs, in which the advantages of co-operative marketing and the work of the Southern Pecan Growers were explained."

crack fast enough to fill demand, and all were sold by the holidays.

You may remember that I am also growing improved chestnuts, which are doing and selling well, as you may see by inclosed account sales. These nuts are grown mostly on land that cannot be cultivated. They need little pruning and no spraying. The ground is kept clean by pasturing with sheep. I find nut growing far more profitable than fruit, and far more certain as to crop and market.—E. A. Riehl, Godfrey, Ill., in Rural New Yorker.

G. H. Corsan, Brooklyn, N. Y., nut grower, writes from South Bend, Ind., under date of Nov. 28th: "I have been on the move ever since last winter. We leave tomorrow for Sioux Falls; then over to the Pacific Coast."

Western Nut Growers Association

THE ninth annual convention of the Western Nut Growers Association was held at Salem, Ore., Dec. 5-6, under the direction of President Ben F. Dorris, Springfield, Ore., and Secretary C. E. Schuster, Corvallis, Ore. Following was the program:

Opening Address—President Ben F. Dorris, Springfield, Oregon.

Status of Walnut Industry of China—C. A. Reed, U. S. Department of Agriculture, Washington, D. C.

Insects of Walnuts and Filberts—A. L. Lovett, Entomology Department, O. A. C.

Costs of Producing and Maintaining a Walnut Orchard—Ferd Groner, Hillsboro, Oregon.

Open Discussion on Walnut Questions—Led by Chas. A. Trunk, Dundee, Oregon.

Association Banquet.

Propagation of Filberts and Walnuts—D. H. McGogy, McMinnville, Oregon.

Root Stocks for Filberts—R. H. Turk, Washougal, Washington.

Open Discussion of Filbert Problems—Led by A. M. Gray, Milwaukie, Oregon.

Record of a Filbert Orchard—H. A. Kruse, Sherwood, Oregon.

Drying and Storage of Filberts—H. Hartman, Horticultural Department, O. A. C.

Results of Experimental Work on Filbert, Walnuts and Chestnuts—C. E. Schuster, Horticultural Department, O. A. C.

Practical Roadside Planting

Judge Walter Clark, Supreme Court, Raleigh, N. C., says in the Oxford, N. C., Ledger:

Will you permit me to repeat a suggestion which I made through your columns many years ago on my return from Europe, which was that on each side of our public roads trees should be planted that will bring in some profit and thus aid in paying the expenses of the maintenance of our highways?

I called attention to the fact that in France and Italy this is almost universally true. In France the roads are in three classes: National Routes, departmental routes and commercial routes, which roughly correspond to (1) great roads laid out and maintained by the national government; (2) state roads; and (3) county roads. On each side of all these is a row of trees which are a striking feature of the landscape. In France, these trees are at stated periods cut down to give room for younger trees which are growing up alternately.

In Italy the trees, Lombardy poplars, are used for the grape vines to run on. In France the wood is sold and goes far for the support of road maintenance, and in Italy a rent is charged for the use of the trees by vine growers.

I suggested then as I venture to suggest now, that papershell pecan trees be planted on each side of every road in this state and the fruit be sold for road maintenance. They would produce a considerable revenue. The shade of the trees will make traveling more comfortable and the roots will keep the roadbed dry. All three of these advantages have been the result of other countries, though the trees used have not been pecan trees.

I respectfully submit this to public consideration.

Likes the Texas Prolific

Austin, Tex., Dec. 3—The best trees for this locality, says Prof. Pearce, of the University of Texas, are the Texas Prolific. These trees withstand droughts and insect pests better than the average varieties, and bear the largest nuts in the greatest quantities. He stated that from one tree of this variety he harvested more than \$100 worth of pecans. He has about 300 trees.

PECANS PROVE TO BE BETTER THAN INSURANCE

Eighteen Years' Planting at 125 Pecan Trees Per Year Would Produce 2500 Trees of 9-Year Old Average and Attainment of Annual Revenue of \$5,000, Which Is Only the Beginning—A Few Pecan Trees Around the House Will Pay the Taxes; Ten Acres Will Support a Family in Comfort; One Hundred Acres in Luxury—Not a Big Job—\$10 Per Acre for Peaches on the Hills; \$15 to \$25 Per Acre for Pecans in the Valleys.

J. O. Anderson in West Point, Ga., News

AS NEAR as I can recall, my life insurance policies have cost me for the last eighteen years something like two thousand five hundred dollars, with about seven thousand dollars in force today. This has been, of course, largely my own fault. But my early experiences in insurance were not wise selections of old line companies, but rather were based on the idea of helping new companies, which proved unsound. But taking it for granted that others have made better insurance investments, my premiums could possibly have matured a five thousand dollar policy, which would be payable only at my death, thus leaving my wife and heirs the responsibility of an investment without experience.

If I had started eighteen years ago planting 125 pecan trees each year, I would now have 2,500 pecan trees in a grove. The average age would be 9 years. My trees of the 9 year class this year will run from \$5 to \$10 per tree; but say they only average me \$2 per tree: 2,500 trees would be \$5,000—which is only the beginning, as a pecan tree grows for 40 years, with a probable bearing age of 300 years. A first class tree will bear 15 to 20 years of age, a crop valued at \$25 to \$50 per year; \$100 is a conservative estimate to place on the value of a crop from a tree fully grown. \$100 an acre is fine, but \$500 an acre is not improbable.

I do not say invest all your insurance money in pecan trees, but I do say, stop and figure some.

I often have the experience of finding a man who bought pecan trees, but he bought from a man who really knew no more about pecan trees than the purchaser did. There are plenty of men who know varieties at sight. I myself am familiar with fifteen different varieties and can identify them by the appearance and color of the wood. This has required much study and use of the midnight oil, and I am, of course, proud of this achievement.

I have no patience with the Nurseryman who contends that varieties are superior. Other growers have the same varieties. Selecting your buds from good bearing trees of the variety you wish to propagate is necessary, but all Nurserymen I know practice this. The Nurseryman is not the one who is making errors; it is the land owner who is failing to plant. If you can't see the handwriting on the wall, don't forget that while your land may not be divided among the Medes and Persians, debts and taxes will be just as bad for you and me.

It really pains me to see a person plant any kind of a shade tree other than pecan. Suppose the shade trees in our cities were all pecan trees, they would pay off the bonded indebtedness! Only a few pecan trees around the house will pay the taxes; ten acres will support a family in comfort, a hundred acres in luxury. Every grower I ever knew was delighted with his grove, and really, the half has never been told.

Most Nurserymen plant a pecan grove or a peach orchard as soon as they can spare the trees. There doesn't seem to be any limit to the market. There is one plant at Baconton that works three hundred hands cracking pecans for candy factories in the

North. Millions of pounds are shipped North in small packages of from 5 to 50 pounds. The price is not questioned much. If you have the Schley or Stuart—and especially the Schley—you can place your own price, which ranges from 50c to \$1.25 a pound. A bushel weighs 44 pounds. Those who have made a study of the pecan for the last 25 or 30 years, say the business of orchards is only in its infancy.

I hope to see these red hills bearing peaches and the valleys bearing pecans

"THE FUTURE OF NUT GROWING"

An Illuminating, Informative Address in New York City by Dr. Robert T. Morris, Leading Advocate of Nut Culture in America

We have reprinted the stirring address delivered by Dr. Robert T. Morris recently in New York City, which was published on two pages of the March issue of the AMERICAN NUT JOURNAL.

This address should be read, not only by all who are interested in any way in Nut Culture, but by thousands of others who have not learned of a subject to their advantage and to the lasting benefit of the country. It marks a forward step in this industry the products of which are shipped in carlots from the Southern and the Pacific states and which is attracting increasing attention in its development throughout the Northern states.

Nut culture is the coming thing. There is opportunity to get in on the ground floor right now—not through large investment, but through intelligent use of moderate means and the application of methods and material at hand as the result of long experience based upon successful investigation.

Copies of this address may be had, while they last, for 10c each from the American Fruits Publishing Co., P. O. Box 124, Rochester, N. Y.

some day. The hills will grow pecans, too, but the valleys won't grow peaches.

It is not a big job. About \$10 per acre for peaches and \$15 to \$25 per acre for pecans. Statistics show that pecans will increase the values of land \$5 per tree a year. 17 trees to the acre means \$85 per tree a year increase in value, and this is based on actual income. Don't be afraid to plant them.

I have been hearing for 20 years that it would be overdone, still the nuts increase in value each year. Everybody is not going to plant. A tenant can't plant, and the actual percentage of land owners who plant is small. Plant a grove as insurance; enjoy it if you live, and if you don't live it is the most permanently fixed income of anything I know. It does not stop because of wars or rumors of wars, but continues to grow and increase in value; is a silent witness and material contributor to the success of those who shall reign in your stead!

AMERICAN NUT JOURNAL, the Official Journal, three years for \$5.00; twelve months, \$2.00; single copy 20c.

Rosette in Texas

By Charles L. Edwards

We have it here, prevailing to some extent in native trees and orchard plantings. Its first appearance on my place was some ten years ago in a spot not above 25 feet in diameter. In the center of this area was a transplanted tree of the Mobile variety five years old and on either side a small Nursery planting in rows four feet apart with yearling buds of Halbert, Sovereign, Moneymaker, Stuart and Van Deman. All were affected with the malady, some of them seriously. It had been defined as a soil trouble resulting in malnutrition of the trees, and surface applications of bluestone were in that day prescribed as a remedy. During the winter following its appearance, pulverized bluestone was applied freely and in the succeeding spring a liberal treatment of stable manure. With the reappearance of foliage on the trees, there were marked evidences of beneficial results, with a disappearance of all symptoms a season later. Under the circumstances, one could not know whether to ascribe the result to the bluestone, the fertilizer or to voluntary recovery. The small trees have been dug out and the Mobile since rebudded with Delmas is a strong, productive tree in perfect health.

Two or three years later in a pecan nursery of ten acres or more, several spots were noticed in which the trees with yearling buds appeared to be affected in the same manner as those on the home place. Some of the larger trees carried buds a year older and most of them seemed to be recovering. The foliage on the lower branches was healthy; midway between these and the top there was rosette, while the uppermost foliage was healthy. The conclusion was that the roots of these trees began their growth in good soil, but had encountered an unwholesome stratum in working their way downward, finally getting through into good soil again. Under these conditions, it was decided to let the affected trees grow another season and at the end of it most of them showed a healthy growth below, then rosette, with a new and clean foliage at top. An acre or more of black walnut seedlings on a lower portion of this same piece of ground fared worse and at the time of last observation gave promises of being killed out utterly. There should have been an examination of the soil in which these trees were growing, but the thought did not occur.

On a bit of ground used for several years as a cow-lot, a neighbor has a young pecan tree some ten years old, transplanted while a seedling and later budded with Bradley. Until the present season it has made thrifty growth but during last summer showed unmistakable evidences of rosette. There is no lack of fertility of the soil in this case, but a possibility of its being over-fertile. It may be worth while to keep this tree under observation in the hope of learning something more about rosette.

Seven years ago a gentleman in this city having half a dozen native pecan trees on his home grounds was desirous of having

(Continued on page 108)

American Nut Journal

COVERING NUT CULTURE

NORTH—SOUTH—EAST—WEST

AMERICAN FRUITS PUBLISHING CO., INC.
59 State Street - - - Rochester, N. Y.

RALPH T. OLCOTT, Editor and Manager

Official Journal Northern Nut Growers' Assn
Official Journal Nat'l Pecan Growers' Assn

SUBSCRIPTION RATES

Three Years, in advance.....\$5.00
One Year, in advance.....\$2.00
Canada and Abroad.....2.50
Single Copy20

ADVERTISING RATE

Per column inch.....\$2.80
Forms Close 10th of each month

ROCHESTER, N. Y. DEC., 1923

NUT ASSOCIATIONS

California Almond Growers' Exchange—
President, G. W. Pierce; manager, T. C. Tucker, 311 California St., San Francisco.

California Walnut Growers' Association—
President, C. C. Teague; secretary, W. T. Webber; manager, C. Thorpe, 1745 East Seventh St., Los Angeles, Cal.

Alabama Pecan Growers Association—
President, C. Kirkpatrick, Selma, Ala.; secy-treas., Morgan Richards, Selma, Ala.

Georgia-Florida Pecan Growers Association—
President, A. C. Snedeker, Blackshear, Ga.; vice-pres., H. K. Miller; sec'y-treas., J. S. Wight, Cairo, Ga.

Gulf Coast Pecan Growers Assn.—
President I. F. Pritchard, Ocean Springs, Miss. For pecan growers on gulf coast of Texas, Louisiana, Mississippi and Alabama.

National Pecan Growers Association—
J. M. Patterson, Putney, Ga.; vice-pres., E. C. Butterfield, Winona, Tex., and Clifton Kirkpatrick, Selma, Ala.; secy., J. Lloyd Abbot, Spring Hill, Ala.; treas., J. Slater Wight, Cairo, Ga. 1924 meet'g, Cuthbert, Ga., Oct. 1-3.

National Pecan Growers' Exchange—
President and manager, William P. Rullard, Albany, Ga.; vice-pres., J. B. Wight; Secy-treas., A. D. Galt.

Northern Nut Growers' Association—
President, Harry R. Weber, Cincinnati, O.; Vice-pres., J. F. Jones, Lancaster, Pa.; treas., H. J. Hilliard, Sound View, Conn.; secy., Dr. W. C. Deming, 983 Main St., Hartford, Conn. 1924 convention, New York City, Sept. 3-5.

Oklahoma Pecan Growers Association—
President, O. K. Darden, Ardmore; secy-treas., C. E. Ringer.

Oregon Walnut Association Co-operative
President, F. W. Meyer, Dundee, Ore.; Manager, W. H. Bentley, Dundee, Ore.

Southern Pecan Growers Association—
President, R. B. Small, Macon, Ga.; treas., P. J. Brown, Albany, Ga.; secy-manager, Harry U. Jackson, Baconton, Ga.

Southeast Georgia Pecan Association—
President, Dr. W. H. Born; vice-pres., Col. G. H. Harris; secy., J. H. Girardeau, McRae, Ga.; treas., E. F. McRae.

Texas Pecan Growers' Association—
President, H. G. Lucas, Brownwood; vice-pres., John P. Lee, San Angelo; Secretary, Oscar Gray, Waxahachie.

Western Nut Growers' Association—
President, Ferd Groner, Hillsboro, Ore.; secy-treas., C. E. Schuster, Corvallis, Ore.

"I just received in this mail my first issue of the American Nut Journal and I was so impressed with same, that I know I have been missing a great deal; however I hope to correct my error as far as possible. Here with I am handing you my check for \$3.00 for which please credit me with subscription for this year 1923 and please send me the copies of the American Nut Journal for the past three years up to this year's issues, 1922, 1921, 1920."—R. R. RICE, VARNER, ARK.

"I've slipped up on renewing my subscription to the American Nut Journal. Please send it and bill. Can't do without it and didn't realize how essential it is if one is going to keep posted."—S. B. GARBUTT, PRINCETON, CAL.

THE PLEASURES OF PIONEERING

At the second meeting this season of the Men's Club of Poultney, Vt., Nov. 12th, the speaker was Zenas H. Ellis, of Fair Haven, whose subject was "Nut Culture as a Practical and Aesthetic Adjunct to Every Home." Mr. Ellis is an enthusiastic member of the Northern Nut Growers Association. He attended the 1923 convention in Washington, D. C. The hearty reception accorded his address by the Men's Club is an illustration of the marked interest almost invariably aroused by a talk on the edible nuts. Several members of the Northern association have talked to local gatherings to the evident delight of their hearers. The Poultney Journal says:

Mr. Ellis talked on the beechnut, the oak, the hickory, which was a great favorite with the red men, and which tree furnished sugar from its sap in the spring along with the maple, milk in the late summer, the ripened kernels for food in the fall, and its dead wood the best of fuel in the winter. Then the butternut, the hazelnut, black walnut, the chestnut, the pecan, English walnut, etc., came in for a part of his splendid address which was one of the most interesting lectures that has been heard in Poultney in a long time. Mr. Ellis has been for years interested in the growing of various nut trees, and he is thoroughly qualified on the subject.

A rising and rousing vote of thanks was extended to Mr. Ellis. A venison supper followed, accompanied by singing and the members reluctantly arrived at what they declared the end of a perfect day.

THRILL OF THE FIRST SHIPMENT

One of the most interested and progressive of the new members of the National Pecan Growers Association at the Mobile convention of 1921 was Silas H. Jenkins, proprietor of the Magnolia Pecan Groves, Liberty, Miss. At that time Mr. Jenkins' pecan grove was approaching the commercial bearing age and he naturally sought all the information available. He expressed appreciation of the great benefit of the convention sessions and the good work the association is doing generally. He was much disappointed, however, in the delay attending the publication of the official proceedings of that convention. He had procured several new memberships among his friends on the understanding that the printed report of the proceedings would be in their hands promptly. He has not yet quite forgiven the association management for disappointing him and his friends. It certainly is a matter of much importance that the official proceedings of the Association should be in the hands of the members promptly after the conventions.

Mr. Jenkins says his pecan trees made a wonderful growth the last two years. He made his first commercial shipment the last week in November, 60 sacks. The Southern Herald, Liberty, Miss., has this communication:

It gives me great pleasure to announce to you that my son, Sidney H. Jenkins, will take the first commercial shipment of pecans from Magnolia Pecan Groves to Gloster by motor truck, Wednesday of this week, which will be shipped by express to the Southern Pecan Growers' Association, Albany, Ga. All things considered, I am well pleased with both quality and production. Having sold all my sheep, cattle and hogs I shall, hereafter, devote my entire time and efforts exclusively in developing the soil and the trees which will improve the quality and production, and hope my efforts will be a credit to our country and state.

I am greatly pleased that my son, a city bred man, is able to adjust himself so readily to country life. His assistance has been admirable in winding up my year's business. My son and I leave for Chicago Saturday of this week on the Panama Limited from

McComb City. During the winter I will be in Chicago with my family at 4607 Magnolia Avenue, returning to my pecan grove Feb. 1, 1924. For your inspection and approval I am sending a pound each of my varieties, the Stuart, Success and Bass, so you will be enabled to make your own test.

SILAS H. JENKINS.

The trees in Mr. Jenkins' grove are large enough now, he says, to produce 15,000 pounds of pecans a year, and on upward. His is the first grove in his section to produce a commercial crop, and the only one at present of a thousand trees.

A cluster of eight pecans was picked from one of the trees. This was sent to the editor's desk where it reposes as evidence of the work of a pecan power plant in Mississippi soil.

A GREAT PECAN INDUSTRY

One of the largest developments of the pecan industry and its allied lines in South Georgia is the operation of the extensive plant of J. P. and J. B. Miller at Baconton, Ga. They grow pecans on a large scale, develop groves for others, operate the largest crackery in that section of the country, raise livestock, conduct a general merchandise business, manufacture Georgia cane-syrup and sell naval stores. Stretching from Baconton south are splendid pecan groves well into Florida, while on the north the same is true as far as Lee county. The famous G. M. Bacon Pecan Groves, the Jackson groves, the immense Patterson development, the Barnwell groves and other noted pecan developments are within a few miles of Baconton.

Miller Brothers own 2000 acres of pecan groves and are acquiring more. Bigger perhaps than their development in groves and their farming and livestock operations is the pecan cracking business operated under the firm name of Miller's Pecan Nut Crackery. Despite the fact that the pecan crop last year was a short one, this plant had on hand one month 150,000 of the 200,000 pounds of nuts they purchased last year and contracted for another 100,000 pounds bought over a wide territory, and delivered in daily installments, assuring at least 300,000 pounds for handling last season. The crackery handles both pecan meats and pecans in the shell. It is provided with grading machines, and, after the nuts have been graded by this method, they are re-graded by hand. The choicest ones are put up in attractive packages of one, three, five and ten pounds and in barrels and sold under the company's trade name all over the country. About 100,000 pounds of the 300,000 were sold in the shell.

Rogers county, Okla., is producing native pecans in considerable quantity. H. A. Hale, and Samuel Munch, Claremore dealers, have disposed of thousands of pounds of nuts this season. There is heavy production in the Verdigris and Carey river bottoms.

Result of Grafting English Walnut

Woodland, Cal., Dec. 6—G. M. Miller, orchardist of Woodland section, received \$71.90 from the product of one 22-year old English walnut tree on his premises made to the county farm bureau. He gathered 232 pounds of the nuts from the tree which he grafted by way of experiment. The result was so good that he has undertaken the grafting of 200 other trees in an orchard of 600 trees. The grafting doubled the earning power of his trees, he says.

On the Kent county, Mich., farm property were planted this fall 10 bushels of walnuts and eight pounds of chestnuts, to take the place of Norway spruce which succumbed during hot dry weather.

Just mention AMERICAN NUT JOURNAL.

North Carolina Pecan Campaign

ONE million pecan trees in eastern North Carolina within four years is the goal of a campaign started by the agricultural forces of the state last month. The Extension Division of North Carolina State College and the Department of Agriculture is fostering the campaign, according to H. M. Curran, forester of the division, and co-operating with the Extension workers are the various county farm agents.

Mr. Curran, with the assistance of W. N. Roper, of Petersburg, Va., an experienced pecan grower familiar with all phases of pecan culture and handling, have direct supervision over the campaign.

Mr. Curran, says the Raleigh News and Observer, has announced a plan by which he hopes the goal of the campaign will be reached. The plan is to secure 25 men in each county who will agree to plant 100 pecan trees each year for the four years, and to give all possible assistance to these men.

"Our plan is for the local county agent to secure the names of those people interested in planting trees and these men will be visited by Mr. Roper, who will give advice and suggestions as to how the planting may be done, where the trees may be secured and the prices that should be paid for stocks," explained the forester. "We have secured reduced prices for orders placed during the campaign and Mr. Roper will give this matter particular attention. We will encourage the planting of such varieties as the Stuart, Schley, Alley and Success, which have been tested in eastern North Carolina over a period of 15 years by the Division of Horticulture, and have been found ideally suited for soil conditions in this section."

Mr. Roper, Mr. Curran said, will assist in securing and distributing planting stock. A county agent or some specialist of the Extension Division will assist the farmers in selecting lands suitable for the plantings and will visit the groves after the trees have been planted.

If the plan of establishing hundreds of pecan groves in Eastern Carolina with over 1,000,000 trees is materialized, it will mean practically a new product for the state and an additional agricultural income of thousands of dollars.

Later on, Mr. Curran said in speaking of the campaign, it is hoped to establish a Virginia-Carolina Pecan Growers Association for the purpose of handling the distribution of the nuts in the best way. One of the large commercial growers, he said, already has expressed his willingness to enter such an organization and a number of other smaller planters are heartily endorsing the idea.

The present campaign, which will be waged intensively for several months, has the approval, it was announced by Director B. W. Kilgore, of the North Carolina Experiment Station and Extension Service. The Division of Horticulture, it was added, will assist in it.

Mr. Roper and Forester Curran now are visiting various eastern counties in the interests of the campaign.

Propagated English Walnuts in Texas

A. I. Fabis, in charge of the Federal pecan station at Brownwood, Texas, has received English walnuts borne by a tree at Ballinger as a result of budding a western wild walnut with California English walnuts. The grafted or budded nut is much larger than the ordinary English walnut and has a good flavor.

The Round Table

Editor American Nut Journal:

I have some Thomas, Stabler and Ohio black walnut trees; also some Lancaster heartnut and one Mayette Persian walnut. They have been out three years. The heartnuts bloomed last year and then again this year and one of the trees matured nine nuts. One of my Thomas walnuts bloomed and set six nuts. They grew almost to maturity, but it got so hot and dry (three months without a drop of rain right in the growing season) that the tree shed all its leaves and the nuts did not mature. The heartnut tree was within fifty feet of the Thomas tree, but it held its leaves and remained green until frost and matured its nuts.

Last year I got about twenty-five per cent of the grafts I set to live and grow nicely. I have Dr. Morris's book and try to follow his instructions. I have not succeeded in getting any heartnuts to take, however.

This year I had a fine looking lot of grafts and it looked like I would have nearly 100% success. Then there came a flood and the water got four feet deep all over my grafts. When the water went down it turned off so hot and dry that the wax all melted and I did not get a single tree out of 300 grafts set.

I intended to state that my Mayette tree grows pretty well every summer but dies to the ground every winter. Consider it a failure. The trouble with grafting the walnut here with paraffin wax is the sun is so hot that the wax melts off before a union of stock and scion can be completed. I must have something to put in the wax that will raise the melting point very considerably before I can make a success of it. One druggist that I talked to suggested light colored beeswax. I have tried beeswax a little and I do not think it sufficient. Another druggist suggested spermaceti. But he was not at all positive about what it would do.

Will you publish in an early edition of the Nut Journal what information that you may have available upon this point? There was something about it not so very long ago but as I remember there was nothing definite; nothing about the proportion of the hardening wax to use nor about where it could be had and whether it was so expensive as to be prohibitive.

I believe many of your readers would appreciate an article on the subject that would give all details.

It is certain that success cannot be attained in a hot climate like this unless the melting point of the paraffin is raised several degrees.

S. L. BISHOP.

Conway Springs, Kan., Nov. 13, 1923.

The Bainbridge, Ga., Produce Co., under the management of S. Aarons, is doing a large business in pecans. The company buys practically all pecans offered, employs a force entailing a pay roll of \$300 a week and expects to operate its shelling machines up to June 1924. Usually it shuts down its pecan operations in March.

Just mention AMERICAN NUT JOURNAL.

I have been asked to describe how nuts are prepared for the market at my place, "Happy Logs" at Benton, Mississippi, a little over an hour's ride on the train, from Jackson.

This is the way we do it: The nuts are knocked off from the trees averaging fifty feet in height, by long bamboo poles, onto a large sheet made of unbleached muslin, surrounding the tree, and are carried in bags to the drying house. There they are dumped onto a sorting table composed of strips of iron, one-half inch wide by one-eighth inch in thickness. Next they are sorted by machinery in this way. A cup, or nozzle, like a vacuum blower, connected with a suction pump is passed over the nuts, thus drawing out the lighter or defective ones, leaves and rubbish, which pass through a pipe inserted in a window. In this way the refuse is thrown out of doors.

The good nuts drop by gravity into a pocket fed to an endless belt which delivers them to the grader where the grading is accomplished according to size.

The nuts are then put in shallow trays, four inches in depth, and dried by hot air, supplied by a furnace heated by a kerosene oil burner. After drying the nuts are packed in barrels or boxes, ready to ship.

DR. G. W. WHITEFIELD.

DR. DEMING'S MARKED SUCCESS

Secretary W. C. Deming, Northern Nut Growers' Association, says of his Georgetown, Conn., nut orchard:

"Last fall I had several quarts of the finest shagbarks from my grafted trees and several quarts of fine chestnuts and chinquapins, and I am now determined to bring them to the next meeting and show the first fruits and the possibilities. I expect to get more and more each year now, and when my walnuts get to throwing pollen I am going to have some fine walnuts to show. I think I am going to have some this year.

"As for plantings of nut trees, if the files of the Journal could be gone over and a list of all those who are reported to have acreage plantings made I think the results would be surprising. I wish I had kept such a list, but I think most of them are listed in the Journal. J. F. Jones has a list of those who have bought extensively from him. I really think such a list would be most inspiring."

Mena, Ark., Dec. 3—Dr. T. J. Bogard has been harvesting papershell pecans from his orchard in Little River county. Dr. Bogard is believed to be the most extensive planter of pecans in Arkansas. He has 162 acres in papershell varieties and his orchard is said to be the largest in the state. The nuts are selling at the orchard at \$25 per bushel.

New York State Hort'l. Soc. dates: Annual meeting, Rochester, N. Y., Jan. 15-18, 1924. Eastern meeting, Poughkeepsie, N. Y., Feb. 20-22, 1924.

YOUR BUSINESS ANNOUNCEMENT

Can be kept standing in the columns of the Official Journal the year around at a cost of less than 5¢ cents a week! Write for particulars.

AMERICAN NUT JOURNAL, Rochester, N. Y.

Recent Developments in Paraffin Grafting of Nut Trees

THE paraffin method for tree grafting was developed in a northern temperate climate (in Connecticut). In that vicinity the common parowax which may be obtained at any grocery store served perfectly for the grafting of nut trees and incidentally for fruit trees, ornamental and trees in general.

Shortly after publication of the method, reports began to come from warmer climates, not only in America but in other parts of the world to the effect that parowax would not stand up under a hot sun. Re-melting of this material after its application then proved injurious.

In more northerly regions or in altitudes where there was a sharp change in temperature between midday and midnight conditions, the parowax was found to crack. The slight crack, particularly when it occurs over a bud, endangers the success of grafting. The crack causes us to lose maintainance of equable sap tension in graft and stock during the course variations in sap pressures.

For southern regions experiments have developed two practical additions to the paraffin grafting method. Common parowax will suffice if a roll of white paper is tied about the graft or fastened in place with a little rubber band snapped over it. These little rubber bands are cheap and to be obtained from any stationer. Another variation consisted in simply employing a paraffin with a high melting point. Parowax melts at about 125 F. Paraffins with a melting point twelve or thirteen degrees higher may be obtained from any dealer in Standard Oil supplies. These paraffins of high melting point may be still further protected against the influence of hot sun by adding some inert white substance like carbonate of lead, carbonate of zinc, stearate of zinc or carbonate of magnesia. These materials may be obtained from any druggist. Hard paraffins with the addition of whitening ingredients are suitable for warm climates only, because they are subject to cracking where nights are cold.

For regions including this latter feature I am still experimenting and up to date have found the best material for an addition to paraffin to be common pine gum. The suggestion for use of this material was made by Professor H. H. Hume, Glen Saint Mary, Florida, at the September meeting of the Northern Nut Growers Association.

During the past months (October, November) I have grafted peach trees, apple trees and hickory trees using pine gum in combination with paraffin experimentally. Up to date of writing we have had temperatures ranging as low as 16 deg. F. in the night at Stamford and sometimes with hot sun in the middle of the day. The pine gum combination with paraffin seems not to have shown any cracking so far. I do not as yet know if this material will pull through the winter and remain intact. If it does we may probably graft almost any sort of tree during the winter months, experimentally at least; but practically I have found that grafting work with snow flying and a northeast wind blowing should be exchanged for duck shooting. Grafting in winter time will be done only by men who have such an uncomfortable degree of curiosity about what may happen that they don't mind little things like weather.

Incidentally I have learned of a number of things which are not to be done. We are not to add any of the oils to paraffin because they are not miscible to a degree which insures cohesion of molecules. Oils will separate from paraffin when applied in grafting work and will penetrate interstices between scion and stock thereby causing a mechanical obstacle to physiologic repair processes.

Resins must not be added to the paraffins so far as my experience goes to date, because they increase the tendency to "internal strain" in the paraffin coating of a graft, with consequent cracking. Aside from the question of local conditions interfering with the success of the paraffin method of grafting, (as originally described) the principles of the method have been accepted in various parts of the world, including cold regions as well as the tropics. There is need for study of the details suitable for different localities. This effort will carry with it the joy which men find in the exercise of their inventive faculties and the pleasure of saying to sceptics, "I told you so."

ROBERT T. MORRIS.

Nov. 22, 1923, 114 East 54 St., New York City.

NORTHERN NUT GROWERS ASSOCIATION, INC.

AN ORGANIZATION for the improvement, cultivation and distribution of native nuts in the Northern United States and Canada. Through discovery, hybridization and experimental orchard tests it is producing choice named varieties of
PERSIAN WALNUTS
BLACK WALNUTS
HICKORY NUTS
BUTTERNUTS
CHESTNUTS
FILBERTS

Demand for these is greater than the supply. Members have expert advice on planting and care of nut orchards—sources of permanent production of high food value.

Fifteenth annual convention, New York City, Sept. 3-5, 1924.

Membership, including the Official Organ, *American Nut Journal*—\$5.00 per year.

H. J. Hilliard, Treasurer, Sound View, Conn.

Pecans in the Imperial Valley

Brawley, Cal., Dec. 7—"There may be portions of the Imperial valley where as fine pecans will be grown in time, but at the moment Brawley is ahead of them all in quantity as well as quality per tree," said Nurseryman Claussen, the pioneer advocate of pecans in the valley, with conservative and well formulated views as to sections and soil conditions under which the nut can be grown to the best advantage. These opinions he has gathered from careful tests and watching of tree development.

Brawley pecans grow to size even larger than the best of the Yuma product. They have also perfect form. In addition their meat is of the richest flavor. Thus far the cultivation of the crop in the valley is in the experimental stage, it is admitted, but the results that have been attained justify the belief, experts say, that in certain soils and under certain conditions prevalent in several sections, none being better than those in several Brawley areas, the pecan can be grown to exceptional advantage.

Rosette in Texas

(Continued from page 107)

them top-budded with better sorts. These trees had been grown from large nuts planted by a former owner of the place, but their product was so small and their shells so hard as to render them worthless. On inspection, four of the trees ranging from six to eight inches in diameter were vigorous and well grown for their age. The other two were not more than half the size of their sister trees, one of them being hard hit with rosette and the other a poorly grown, puny specimen. Neither of these were considered worth the expense of top-budding, but the owner directed that they be worked along with the others. The rosetted tree was budded with Burkett, one of our first-class Texans, and during the first season the disease was painfully evident in the new budshoots, the next year a little less, with still further improvement the third season. During the fourth summer there was a total disappearance of rosette and an improvement in growth that has steadily continued until it has become a beautiful and very productive tree. To view it in full foliage and fruitage, one would not suppose that it had ever been troubled with disease of any sort. The puny tree was budded with two varieties; the Halbert, another popular Texan, on the lower branches and the Delmas in a better position above. The tree seemed to be congenial to both varieties and the budshoots made splendid growth. By the third year, the tree seemed to have taken on a new life as if under the stimulus of a wholesome medicine. In more recent years its growth, as well as that of the rosetted tree with the Burkett top, has been relatively faster than that of the stronger trees in the same group and all have made notable growth. Taken as a whole, this lot of trees has become one of the pecan show-grounds of this vicinity; and it does seem that budgrowth on the two smaller trees had a reflex action beneficial to their native stocks.

As far as my own observation goes, rosette in native trees is found mainly on land deficient in drainage, often in poor, gravelly spots. No instance is remembered of its prevalence in pecan growth skirting ravines and small watercourses where drainage is perfect.

Louisiana Pecan Development

Monroe, La., Nov. 21—"The pecan crop of northeast Louisiana is more abundant than in years, developing into an important industry for owners of pecan groves. Steps to develop the industry on a more important scale are going forward and there will be considerable additional acreage devoted within the next few years. John M. Breard, Jr., assistant cashier of the Central Savings Bank and Trust company, of Monroe, declares that in his opinion the pecan industry will within a few years be one of the important factors for development in northeast Louisiana. Mr. Breard has two 10-year-old pecan trees at his home on Third and K. streets in Monroe, which produced most abundantly this year. Mr. Breard has already obtained a barrel of pecans from the two trees and states there will be another half barrel to be picked. The pecans are the largest to be found in the Monroe area this year.

"Whenever I saw a pecan that I liked and that my trees did not produce, I cut part of the other tree and grafted it into mine. In that way I got good nuts," says J. E. Pearce, professor of anthropology at the University of Texas, in a letter explaining why he had taken up pecan growing.

DARWIN SHOWED THE WAY AS TO THE AMERICAN WALNUT

By H. R. Mosnat

NEARLY everyone thinks that nut trees are very slow to come into bearing, but this is not correct as regards grafted nut trees, however true it is as to seedling trees, including not only nut tree seedlings, but also fruit tree seedlings, which may be fifteen or twenty years old before they come into bearing; and similarly, the fruit borne by seedling fruit trees is just as variable and uncertain as the nuts finally borne by seedling nut trees. Strange, is it not, then, that while no one thinks of planting a seedling fruit tree, except as an experiment, because a seedling from a red apple may and often does bear yellow apples, and also as different in every other quality, such as size, season, flavor, and so on; still, nearly everyone, if he plants nut trees at all, sets seedling trees without hesitation or misgivings as to the crops, when, if and how borne. Many seedlings never do bear at all.

Crops must be uniform to be commercial and they must be commercial to be profitable, and seedlings are variable, in every way. So conversely, seedlings cannot form the basis of a commercial and profitable industry in nut trees any more than they can in fruit trees.

On the cover of this issue is a picture of American walnut bearing seven nuts, only seventeen months old from the graft. This is as precocious as a Delicious or Jonathan apple even in the Pacific Northwest. In its native home, where it originated, in central Iowa, the Delicious apple is a very slow bearer, taking often eight to fifteen years to come into bearing. In the Pacific Northwest it bears young, which shows how the same variety varies in different climates. For instance, the Thomas black walnut is credited with being an easy variety to graft, as the number of "takes" with it is larger than in the case of most other varieties of black walnuts. This shows variation in this variety of black walnuts, which makes it easier to propagate than many other varieties of black walnut.

Charles Darwin's prophecy in "Variation of Animals and Plants," i., 329, has largely been fulfilled as to grapes of which about 3,000 varieties have been produced from native American wild grapes, and of these hundreds are in cultivation, including the Concord, Delaware, Isabella, Niagara, etc. Darwin, who laid the foundations of modern science, wrote: "Had North America been civilized for as long a period, and as thickly peopled, as Asia or Europe, it is probable that the native vines, walnuts, mulberries, crabs and plums would have given rise, after a long course of cultivation, to a multitude of varieties, some extremely different from their parent-stocks."

Notice the order in which our native plants are named, as it is significant. Vines are first, and how splendidly this has been verified! Walnuts are second and how little has been accomplished up to this time! The order in which these plants is named, is not haphazard or accidental. Darwin was too great a scientist to write in any such careless manner. There are more than 200 varieties of American plums and more than 300 kinds of raspberries, says Prof. L. H. Bailey. Darwin placed walnuts second on the list of native American fruits as to possibilities, because he evidently considered the opportunities for advancement and development of that tree, as second only to what the future held in store as to prog-

ress in American grapes, but that took about 200 years.

There are certainly as many acres of land particularly suitable to black walnuts in the northern and eastern sections of the United States, as acres of land adapted to grape culture which has become an immense industry. The land that can be used for black walnuts is even more adapted to that crop and not much of anything else, than the land suitable for grape growing.

The Concord grape is only two generations from the wild fox grape, and one of the greatest scientists the world has ever produced evidently considered that the possibilities for progress in American walnuts, which means black walnuts, was second in importance to what has been done in American grapes. The native, wild fox grape, from which the Concord came, is not much of a fruit. It has been called aptly, "Wild seeds with a skin over them." But it was the basis of an immense industry with an investment of billions of dollars and an annual crop running into the millions, for the Concord variety is probably not less than 90% of all the grapes grown in the United States east of the Rocky mountains. And as mentioned, the Concord is only two generations from the wild fox grape. It was introduced early in the fifties by Ephriam W. Bull, and it is simply a second generation of the northern fox-grape type, a common wild grape of northern and eastern United States.

It is a long way from the wild prototype of the Concord grape to that variety, the value of which it is impossible even to estimate. This has been done with grapes, but still remains to be done with black walnuts, although the possibilities as to black walnuts are almost as great.

Just think what a splendid and valuable nut we would have, if a black walnut as much in advance of our eastern black (*Juglans nigra*) could be produced, as the Concord grape is better than the wild grape from which it is only a second generation seedling. Such a walnut would, like the Concord grape, be of value beyond estimate. What has been done with the wild American grapes, can be done probably to almost the same degree, with the wild American black walnut. There is no time to be lost in getting started in this work, because already many of the most valuable black walnut trees have been cut down and made into timber, and thus lost forever, and some of those trees were beyond price as producers of excellent nuts. It used to be said that black walnuts could not be grafted, but the same used to be said of pecans, and now pecans are grafted by the hundreds of thousands.

Holdenville, Okla., shipped native pecans by the carload this season, at 9 to 10 cents a pound.

An Unexcelled Medium

FOR ALL NUT ADVERTISING

The "American Nut Journal" is the only national publication devoted to Nut Culture in all its phases. It circulates throughout this country and abroad.

Advtg. Rate: 20c per line, \$2.80 per inch

American Fruits Publishing Co., Inc.
39 State St., Rochester, N. Y.

In Preceding Issues of This Journal

AUGUST 1923

Chain of "Cash" Nut Stores.....	24
Feature of Big City Merchandising..	24
The Rise of the Southern Pecan	
By William P. Bullard.....	25
Northern Nut Growers Plan Meeting....	28
Southern Pecan Growers Exchange.....	28
Seven Virtues of the Perfect Pecan	
By Sam H. James.....	29
Where to Plant the English Walnut....	31
Program for National Pecan Asso.....	32
Field Observations in Central Ala.....	38
Origin of Leading Pecan Varieties	
By Prof. E. L. Overholser.....	22
Nut Growing in British Columbia.....	26
Nut Notes from Illinois.....	26
Bark Beetle Solves Mystery.....	27
Pecan Culture in California.....	33
Japanese Walnuts, Pecans in Indiana...	27
Georgia Pecan Tree Ceremonial.....	32
Crop and Market Reports.....	34

Oregon Walnut Association

Dundee, Ore., Dec. 15—The Oregon Walnut Association meeting here recently decided to build a new plant to handle the members' output. Seventy of the 105 members were present.

Checks were given out covering the first dividend on the 1923 crop of walnuts. This pool paid out in full on No. 1 soft-shell nuts and made advances on the No. 1 Franquettes and Jumbo Mayettes. W. H. Bentley, secretary, reported that all seedling and Mayette nuts of the association's 1923 pools had been sold.

Representatives of the association brokers reported a large demand for Oregon walnuts this year. Four carloads have been sold in the Middle West and an order for nine carloads could not be filled.

Cracking tests of the various grades gave the following results: Franquettes, 48 per cent meats; Budded Seedlings, 46 per cent meats; Mayettes, 42 per cent meats; No. 1 Seedlings, 41 per cent meats, and No. 2 Seedlings 40 per cent meats. In comparison with the California tests it gives the Oregon nuts an advantage on the market.

RECIPES

Pecan Souffles

2 egg whites.
½ cup sugar.
½ teaspoon vanilla or orange extract.
1 cup pecan meats.

Beat egg whites to stiff froth, then gradually beat in 2/3 of the sugar. Continue beating for 5 minutes, then fold in the rest of sugar, pecans and flavoring. Drop from teaspoon on oiled paper. Bake about ¾ hour in slow oven. Makes about 20 cakes.

Pecan Chicken Mousse

½ cup pecan pieces.
½ cup diced chicken.
1 cup chicken stock.
3 eggs yolks.
1 tbs. gelatine.
1 cup heavy cream.
Salt, cayenne, paprika.

Slowly pour hot chicken stock on slightly beaten egg yolks, add seasonings and cook, stirring constantly until it begins to thicken. Add gelatine, which has soaked 5 minutes in a tablespoon of cold water, chicken and pecans. When the mixture begins to congeal, fold in the well whipped cream and pour into mould.

Pecan Croquettes

½ cup milk.
½ cup water.
2 tbs. cornstarch.
2 tbs. lemon juice.
1 tbs. chopped onion.
1 ts. salt.
1 egg (or 2 yolks).
¼ cup breadcrumbs.
1 cup pecan meats, ground.

Heat the milk and add to it gradually the cornstarch mixed with a little of the cold milk. Let boil up thoroughly while stirring constantly, remove from and add remaining ingredients. Cool, shape, egg and crumb, and fry in deep fat. Makes 10 croquettes.

The American Nut Trade: Market and Crop Reports

THE ALMOND

Italian Almond Prices Depressed

Editor American Nut Journal:

Almond prices to the Italian growers have been depressed by lack of an American market since the United States tariff on almonds was raised from 4 to 14 cents a pound, says a report to the United States Department of Agriculture from a representative who recently visited the most important almond growing sections of Italy. While it is not generally considered, he says, that the tariff will keep American buyers out of the market permanently, it is estimated that just before the higher duty went into effect American buyers from 50 to 60 thousand bales, much of which stock is still on hand in New York. Large stocks are on hand in Italy. There is little hope of more buying from growers until the stored supplies go into circulation.

As a result of this situation the Italian almond market is depressed and competent judges look for lower prices, despite the fact that the Italian crop this year is light. Italian growers, the report declares, believe America is well supplied, and will not come in the market for some time. European demand for almonds has been light, owing to adverse economic conditions. Crops grown by small holders will be on the market shortly and as the small holders must sell for cash to meet current expenses, it is thought there will be plenty of almonds to fill all orders. Large growers have been withholding supplies in the hope of favorably influencing prices, but the representative of the Department of Agriculture thinks it will not pay them to do so much longer, because the surplus is too large to be carried indefinitely and moreover is deteriorating.

The chief almond growing section of Italy lies behind the port of Bari on the southeastern coast. In this district a large part of last year's bumper almond crop is still on hand, but a small crop is expected this year. Last year the Bari crop was about 400,000 bales of 220 pounds each; this year it is estimated the output will not exceed 125,000 bales. The carryover from last year is estimated at 200,000 bales. Almond crops in the Balearic Islands are rated good to heavy, and Spain is expected to have an average crop. From an average all around crop in the principal almond exporting countries, the export surplus, the report says, will perhaps reach 550,000 bales. The biggest world crop was estimated at 700,000 bales and the smallest at 300,000. It is reckoned almond plantings in the Bari sections have increased about 33 per cent in the last ten years.

Standards of living are so low among the Italian almond growers, that their competition will inevitably be difficult for American growers to meet, the report adds. It says that unless by intensive cultivation and careful selection of stock American growers raise only the highest grade of almonds for the confectioners' trade, they cannot make the business pay. When a parcel of California almonds was shown to a Bari grower, he called them poor in quality, saying they had size but were of indifferent texture and flavor. Nevertheless, the Department's representative says, there is not

a great deal that the American grower can learn from the Italians in the matter of almond culture. On the contrary the Italians praise the superior science of the Americans.

Progress is, however, being made by the Italians in scientific almond culture. Leading Italian scientists are investigating the conditions of growth, diseases and culture of almonds, and are educating the younger generation of growers in up-to-date methods. This means, it is declared, that Italian and Sicilian growers, with the unlimited cheap labor at their disposal and with the improvements in grading, may be able to put almonds on the market at prices which will defy competition. At present, however, it is only on the large estates in Italy that modern methods are used. Cultivation generally is extremely primitive, hand labor being used for everything.

Resistant to Red Spider

By Myer J. Heppner, Univ. Calif.

One of the most serious pests the California almond grower has to contend with is the common red spider. During the year 1918 the division of pomology of the University of California started an extensive experiment in almond breeding for an almond tree that would bloom late enough to escape frost and yet be productive of good nuts.

During 1922, 268 trees came into bearing for the first time. Careful observations were made of the individual nuts, crops and tree characteristics. It was noticed that four trees secured from the Reams x California Paper Shell cross were practically resistant to the attack of the red spider. Each tree stood out very markedly as all other surrounding trees were heavily infested with the spider and shed their leaves prematurely. It was also noticed that these seemingly resistant trees were the heaviest bearers of all the 268 trees, producing as high as 11 pounds of nuts per tree at three years of age. Figuring 80 trees per acre this means nearly 900 pounds per acre for three year old trees. This is an enormous crop for a young tree when it is considered that the average crop for bearing almond trees in California is round 1,000 pounds per acre. Blossom records showed that all the trees were relatively late bloomers.

Although it is impossible to draw any definite conclusions from two years' observations or any breeding experiment it appears that California almond growers may have a new nut to offer the trade, grown on trees that are not attacked by the red spider. Time will tell.

THE PINON NUT

Tucson, Ariz., Nov. 17—A new industry is in the making in the Santa Catalina mountains, near here, local forestry service officials believe.

According to an announcement made recently by the forest officials, pines bearing edible pinon nuts are increasing rapidly in this range, and it is hoped that soon there will be enough bearing trees to make the harvesting of the nuts a profitable industry.

"There are two types of pinon trees in the Catalinas," a forest official said. "One type bears the edible nuts, while the other type is practically useless."

"In the mountains around Albuquerque, N. M., where the nuts grow in abundance, the industry is flourishing. The nuts are shelled and shipped to all parts of the United States. Within a few years, we may hope to see enough trees producing to make the gathering and shelling of the nuts worth while in this community."

It is at Albuquerque that Mrs. Fannie S. Spitz perfected her pinon shelling and separating machine which has revolutionized the pinon nut industry.

THE CHESTNUT

2,000 Bushels Chestnuts in a Day

Clarksburg, W. Va., Dec. 3—The largest amount of chestnuts ever shipped from this state, the banner state in the production of that delicacy, was shipped last month through here to points throughout the country. More than 2,000 bushels were handled by the express company in one day.

Chestnut Blight Results

Hagerstown, Md., Dec. 5—The chestnut crop in Washington county is a failure, like those of preceding years. There are no chestnuts of any consequence, either wild or cultivated, all trees having been killed by the blight. The Cumberland Mountains in Kentucky are about the only place the blight has not reached throughout eastern mountains.

Besides the work on chestnuts at Bell, Md., the U. S. government experts are experimenting with the Chinese chestnut at Asheville, N. C., in the endeavor to obtain a blight-proof variety.

BLACK WALNUT

Sitting Up and Taking Notice

The Edenton, N. C. Enterprise says: The suggestion has been recently made to this newspaper that it would be profitable to grow black walnuts around the edges of swamp land and in places not otherwise in cultivation. It is said they have a machine for crushing them and preparing them to eat and that they should bring something like \$2.00 a bushel on the market. This is worth considering, as they would be very little expense to grow—planting the trees and harvesting the nuts being about all there is to it. If there is a demand for them, they would evidently be profitable.

The forester of North Carolina this season had several carloads of black walnuts to be disposed of and sought a market for them.

PERSIAN WALNUT

Big Walnuts from Paderewski's Ranch

In answer to the appeal of Miss Virginia Morse, assistant secretary of the Paso Robles, Cal., Chamber of Commerce, Supt. Hemphill brought in half a dozen of two varieties of English walnuts, one of which was Wilson's Wonder, to which special reference was made in the American Nut Journal a few years ago. The Paso Robles Star says:

"These nuts are extremely large and the shells are full of good firm meat. They are all about the same size, one of them measuring seven inches around the long way and six inches the other way. It is a pity there is not a whole bushel of them to serve as an exhibit instead of but half a dozen. They were grown on trees on Paderewski's ranch, which are only about five years old. There are only a few of the trees as it is only two years since the first small crop revealed the gigantic sizes and fine quality of the nuts. The shells are fairly thin and the nuts easily cracked."

"About the same number of another variety of walnuts were also brought in by Superintendent Hemphill. These came from the orchard of Madame Paderewski. They are quite oblong in shape, measuring five inches around the long way and four the other. While not so large as the Wilson's Wonder, they are much larger than the usual varieties. They are the Franquette variety and large in meat in proportion to the weight of shells. They also make a fine exhibit, which would be more impressive if there were many more of the nuts."

Just mention AMERICAN NUT JOURNAL

THE PECAN

GEORGIA

Large Savannah Industry

The Southern Paper Shell Pecan Company, 308 West Congress street, a concern having a large output in shelled and unshelled pecans, is the newest addition to the list of industries in Savannah.

Nearly eighty workers are employed in the new plant, the major portion of this number being engaged in extracting the pecan meats from the shell. Those who are in this work, says the Savannah News, are seated at long benches, some cracking the nuts while others pick out the kernels. The shelled pecans are sold in several grades, among them being the Rose Brand, Stuart Super-Jumbo halves, Stuart Jumbo halves, Delmar extra quality halves, second-grade Delmar halves, fancy grade selected seedlings and medium seedlings.

Shelled pecans are packed in five-pound cartons, 20 cartons to the case and in barrels, containing about 165 pounds. Schley, Stuart, Frotcher, Delmas, Van Deman and seedlings are marketed in the unshelled class. These are also known as Rose Brand. They are packed in bags of 100 pounds.

Louis J. Roos, general manager of the concern, said that the company is marketing the majority of their product in Eastern markets and that there is demand for all pecans that can be obtained. The larger part of the pecans are obtained from Georgia growers within a comparatively short distance of Savannah. The payroll of the new concern is about \$500 weekly.

No attempt has been made to market products of the plant in the retail trade, all sales up to this time having been made to wholesale merchants only. Orders are filled for the unshelled and other grades of shelled nuts.

One of the most interesting machines in the plant is the grader for sorting a particular variety of the unshelled nuts according to size. Large metal drums on which are holes of different sizes sort the nuts rapidly according to size. This machine is driven by an electric motor.

The Southern Paper Shell Pecan Company is controlled by the Roos Hide and Fur Company, Louis J. Roos being general manager. Sam J. Meyers is superintendent of the plant. In addition to the office on Congress street, a warehouse is maintained at 307 West St. Julian street.

Pecans for Jefferson Davis Highway

What will result in a magnificent highway between Richmond, Va., and Vicksburg, Miss., is the huge undertaking of planting pecan trees at every mile post along the Jefferson Davis Highway started at the organization meeting of the Jefferson Davis Memorial Association held recently in Athens, says the Savannah News. It is the plan of the new association to plant trees and shrubbery along the Jefferson Davis Highway in an effort to commemorate the leader who played such a prominent part in defending the cause of the Confederacy.

The Jefferson Davis Highway committee proposed to plant pecan trees at every mile post along the line of the highway, which touches Savannah. The ground surrounding the road on each side will be kept in the best of condition and every effort made to beautify the country which the highway traverses.

When the state association formed, local organizations will be perfected by correspondence until each county touched by the highway will have an organization to cooperate with the state workers.

Measure To Tax Candy Defeated—An effort was made in the Georgia legislature last month to pass a bill providing for a tax on all candies manufactured to sell at retail for more than fifty cents a pound.

Candies containing high grade pecans cannot be retailed for that price, so the proposition directly affected the pecan industry. Pecan interests at once got busy and the measure was defeated.

Waycross, Ga., was to have a pecan shell plant, but it still lacks this.

Pecan Investors Visit Albany, Ga.

Members of Pecan Orchards Company, of Chicago, and other men from that city, says the Albany, Ga., Herald of Nov. 13th, spent Monday and Monday night in Albany, coming down in a special car on the Dixie Flyer, to look over the properties of the Flint River Pecan Company, and were entertained at a barbecue dinner at the home of Dermot Shemwell yesterday afternoon at 5 o'clock.

D. A. O'Connor, president of the Pecan Orchards Company, and Baron F. A. Fazio, secretary-treasurer of the organization brought with them on the special car twenty-four men, who spent the day looking over the groves of the Flint River Company.

There were artists, architects, druggists, lawyers and men of other professions and businesses in the party, the list including, besides President O'Connor and Baron Fazio, A. Allegrini, Edward Bellezza, Alex Capraro, F. Coriaci, Samuel Mackeehan Dague, A. Guerrieri, E. Jannotta, Charles DeRosa, Mike Lassalla, Louis Macchioni, Joe Maulella, F. Mirabella, A. Bagnino, A. Nicoletti, N. Onoraty, R. Pascuzzi, G. Pennetti, N. Pope, Mr. and Mrs. Charles A. Reading, John Sparanza, L. Vaccaro, J. Ursitti, D. Matteo, and Paul Vesta.

In addition to the Chicago delegation other guests at the barbecue dinner were Joseph S. Davis, who was among the speakers; John A. Davis, who also made a short talk; W. P. Bullard, president of the National Pecan Growers Association, Steve Leggett, Herbert C. White, of Putney, and Mr. White's guest, Mr. Adams, of Chicago.

The special car was parked here through the day and night, returning on the Dixie Flyer Tuesday morning.

Mr. and Mrs. Charles Reading will remain in the city several days, Mr. Reading looking after business. He is one of the directors in the Flint River Pecan Company.

Special Railroad Rate Suggested

At a recent meeting of the Albany, Ga., Chamber of Commerce, Mr. Springer of Illinois, a guest of J. M. Paterson declared that the pecan is a good investment, but that it requires work and that money should be spent on the orchards each year for cultivation, spraying and care. His own groves, Mr. Springer said, have trees that produced more than 150 pounds of nuts this year and some acres as much as 1,000 pounds. Mr. Springer suggested that Albany work for a winter railroad rate from the North.

Thomas county, Georgia, this year had its largest pecan crop, many young trees coming into bearing.

TEXAS

Developing the Texas Pecan

Mrs. Edgar T. Neal, San Saba, Tex., whose portrait was in the November issue of the Journal, has an article on the pecan, in the Houston, Tex., Chronicle, in which she says:

"A pecan committee appointed by the San Saba Chamber of Commerce, with A. W. Woodruff as chairman, has been instrumental in putting this county on the map as a pecan county of the first rank. The San Saba Pecan Syndicate is composed of Dr. G. A. Wilson, A. W. Woodruff and S. F. Clark, former county agricultural agent. They propose planting a 90-acre tract in five-acre plots of 12 trees to the acre, for intensive cultivation and a demonstration of the rapid development of commercial orchards. This county contains trees without number that can be top worked, and which will be rapidly developed, in that way greatly increasing the output of nuts from the county, the record crop of which is more than 3,000,000 pounds.

"Many pupils of the San Saba schools are learning to graft and bud pecans. Miss Vero Millican, 15-year-old daughter of W. J. Millican, at Bend, is an expert, perhaps the youngest in the state in that line of work."

Farmers in the El Paso valley, Texas, plan to test the practicability of producing pecans there. A pecan tree at San Elizario, 50 years old, according to natives, is still bearing regularly.

Just mention AMERICAN NUT JOURNAL

Floods Cause Loss of Pecans

On Nov. 7th J. H. Burkett, nut specialist, Texas Dept. of Agriculture reported that heavy rains had damaged the pecan crop at least 10%. The rains caused floods to spread over the bottoms and wash away the fallen nuts, which the growers had not yet picked up. Burkett stated that from personal observations made and reports from his field men making a summary of conditions in different parts of the state, the pecan crop probably would not be above 250 carloads marketed from the growers and orchards of Texas.

Referring to market conditions, Mr. Burkett stated that the large wholesale buyers in the market centers, apparently had a "carry-over" of the 1921 crop of 50 cars or more, and that they were not disposed to take the new crop pecans until the "carry over" was well out of the way.

He stated that in his opinion there would be a scramble for the new crop just as soon as it becomes known that the crop in Texas is much below the average yield. The price to the grower at point of origin should be around 20 cents per pound, when compared with the prices being paid for English walnuts, almonds and Brazil nuts, the pecan being decidedly superior to these. Twenty cents per pound for pecans has reference only to the average grades. The improved varieties are selling at 25 cents to 75 cents per pound.

"Pecans As Large As Cigars"

A recent issue (Nov. 25th) of the San Antonio, Tex., Express contained a photo-engraving of a cigar box filled with pecans, with this explanation:

Charles Gutzeit, 402 East Myrtle street, claims the distinction of owning a pecan tree in his yard which produces nuts "as large as cigars." In the accompanying picture is shown a cigar box which formerly contained 25 average sized cigars, now well filled by 23 "Steckler's Mammoth" pecans grown on a 13-year-old tree at Mr. Gutzeit's residence. The pecans are of the paper-shell variety. The yield of the tree this year was about a bushel from which it is hoped to get buds to distribute among San Antonio school children. The "Mammoth" pecans run between 28 and 30 to the pound in weight.

The exhibit shown in the photograph is to be added to the Attwater Collection of Natural History, which recently was opened publicly in Main Avenue High School. The pecan exhibit of the Attwater collection already is said to be one of the most complete of its kind in the world. The collection is open daily from 11:30 a. m. until 5 p. m., except Friday which is reserved for parties of school children.

San Antonio to Houston

San Antonio, Tex., Dec. 5.—As the result of a suggestion made by Representative Harry M. Wurzbach in an Armistice Day address to H. U. Wood Post, American Legion, of Seguin, a movement has started in Guadalupe county to plant pecan trees along the highway to San Antonio, each tree being named for some soldier. Mr. Wurzbach's suggestion was to line the highway between San Antonio and Houston with pecans, memorializing not only World War soldiers but also those who participated in other wars. He told the Legion not to wait for an elaborate organization, but to get a few trees, plant them, and thus start the movement. He said recently that he believed the Legion members of Bexar county would follow the Guadalupe Legion and that if the trees were planted and cared for three or four years, they soon would become, not only ornamental, but useful and the yield of nuts could be applied in various ways.

Native Pecans vs. Cotton

Pecans this season came to the rescue of A. B. Behrens, a San Saba County, Texas, farmer living in the Wallace Creek community. Behrens planted 110 acres in cotton, the grass hoppers destroyed his crop, and from the entire 110 acres he only gathered three bales of cotton. Native pecan trees growing along the creek bank on his place, on land that could not be put in cultivation, or used for any other productive purpose have yielded him a money crop of \$1,200.

THE PECAN

Large Shipments from San Angelo, Tex.

San Angelo, Nov. 17—Twelve carloads of pecans raised on the three Concho rivers and their tributaries have been shipped this season from San Angelo, representing about 40 per cent of the 1923 nut crop which will be concentrated and handled from this point, reports John P. Lee, vice-president of the Texas Pecan Growers Association.

The dozen cars have carried around 360,000 pounds of pecans to St. Louis, Chicago, New York and other big market centers. The nuts have commanded an average of 10 cents a pound, or \$36,000. Lee believes that 30 cars will be shipped from San Angelo, a normal crop. At prevailing prices this will bring \$90,000 into the county. The market now is steady and any change likely will be upward.

Only about two carloads of pecans were shipped from San Angelo last fall. In 1921 45 cars were shipped. The year before that was a light crop year, following the shipment in 1919 of 54 cars, the largest number in history.

Eludes the Pilferers

Charles L. Edwards, the veteran pecan grower of Dallas, Tex., gets his packages of pecans to destination unopened in transit by curious handlers in post office and express service, by labeling them "Seeds" and keeping from the wrapper and other indication of the contents. It is an effective method well worth considering.

Stokes Bros. & Co., Lampasas, Tex., on Nov. 9th shipped the first carload of the pecans from the Bend Pecan Growers Association.

MEMBERSHIP TERMS

National Pecan Growers Association
The National Pecan Growers Association fee for membership is \$2.00 per year, with a student membership fee of \$1.00.

The subscription price for the American Nut Journal, official organ, is \$2.00 per year.

Note combination offer below.

REGULAR YEARLY RATES

Association Membership.....\$2.00
American Nut Journal..... 2.00

SPECIAL YEARLY RATES

Association Membership } \$3.25
American Nut Journal }

Address J. Lloyd Abbot, Sec'y.
Route 1, Spring Hill, Ala.

OKLAHOMA

Planting Pecan Orchards in Oklahoma

Miami, Okla., Dec. 6—With the crop from several pecan groves netting the owners comfortable sums of money this year there is considerable talk of planting the paper shell pecan, and Guy Jennison expects to be the first man to set out such a grove. He will act under the advice of James Lawrence, county agent, who believes that pecans will prove a profitable crop. It is likely that few of the wild pecans will be grafted with the paper shelled pecan, but that the latter will be planted in regular orchard style.

Judge Fullerton is clearing 320 acres of his land which has a large number of pecan trees on it, and will plant orchard grass and blue grass among the trees. He expects to reap at least as much from each large pecan tree as from an acre of ordinary crops.

\$100,000 for Carter Co., Okla.

Armore, Okla., Nov. 26—Value of the pecan crop in Carter county is estimated at between \$75,000 and \$100,000 by agricultural experts here who have made a survey of the crop in this county. This year's yield as figured will be about 75 per cent normal, and heavier than it has been for several years.

Norman, Okla., Nov. 10—Cleveland county will have a bumper pecan crop this fall, according to P. K. Norris, county agent. Oklahoma's pecan crop this year is one of the greatest in history and Cleveland county will produce better than the average Norris said.

Lawton, Okla., Dec. 5—The Comanche county pecan crop was short this year. The nuts sold at 8 to 11 cents a pound.

ALABAMA

Largest Grower in Lee County, Ala.

Opelika, Ala., Dec. 10—Lee county citizens are giving much time and thought just now to the culture of pecans. Col. T. D. Samford perhaps has the largest single grove in the county, with the Auburn college a close second. He has fifteen hundred young trees now spread over more than a hundred acres of land. These trees are expected to be bearing in paying quantities within the next year or two.

There are many smaller groves scattered throughout Lee county, and Opelika merchants are delighting in showing the native-grown pecans in their show windows and in talking up the industry to all who care to get first-hand information on the subject. At this time there are many visitors here who are very much interested in this line of horticulture and many will go back to their homes enthused over pecan culture.

100,000 Pounds from Fort Deposit, Ala.

Fort Deposit, Ala., Nov. 24—The Fort Deposit pecan growers are in the midst of the harvest. Thousands of pounds are being daily shipped to several sections of the United States. Taking into consideration the many large orchards within a radius of five miles of Fort Deposit, a conservative estimation is that not less than 100,000 pounds will be shipped from this point this season.

Union Springs, Ala., Nov. 24—Farmers of Bullock county are getting a good price for their pecan crop this year. The nuts are being gathered and marketed in large quantities and from all indications there will be a full crop. There are many large groves in Bullock county, some of them containing as many as 1,500 trees and the nuts grown in this vicinity grade from the small seedlings to the largest and finest varieties.

AMERICAN NUT JOURNAL The National Journal of Commercial Nut Culture

Published Monthly by American Fruits Publishing Co.

121-123-125 Ellwanger & Barry Building

39 State Street

P. O. BOX 124

Rochester, N. Y.

SUBSCRIPTION RATES

Three Years, in advance...\$5.00
Twelve Months in advance 2.00
Canada and Abroad, 3 yrs. 6.50
Canada and Abroad, 1 yr. 2.50
Single Copy30

ADVERTISING RATES

	Per Mo.	Yearly	Per Mo.	Yearly
1-3 page	\$2.50	\$25.00	1-3 page	\$25.00
1-2 page	\$1.25	\$12.50	1-2 page	\$12.50
1-4 page	\$2.50	\$25.00	1 page	\$8.00

A one-inch Business Card the year around at 88c per week!

American Fruits Pubg. Co.:

Herewith is \$..... for which please enter subscription for
AMERICAN NUT JOURNAL for the term of.....

Date.....

Nut Culture Information

Reprint folders on topics discussed in American Nut Journal. 10c Each.

CHESTNUT—

Breeding Chestnuts for Disease Control—U. S. Dept. Agr.
Purchase of Chestnut Tree With Reference to Blight—G. F. Gravatt.

FILBERT—

Establishing the Filbert Grove—George Dorris.
The Future of the American Grown Filbert—Richard H. Turk.
Hazel Blight—Dr. Robert T. Morris.
Sources of Supply of Hazel Nuts—Bulletin Imperial Institute.

PECAN—

Average Yield of Pecan Orchard in S. W. Georgia.
A Woman's Close Study of Pecans for the Table.
Co-operating in Marketing Pecans—William P. Bullard.
Cost and Development Pecan Unit Orchards—J. M. Patterson.
East Texans Reap Fortunes on Pecans.
Pecan Areas of the United States—M. P. Reed.
Pecan Orchard Instructions—C. A. Simpson.
Pecan Scab Experiments of 1922
Pecan Rosette; Practical Treatment—W. A. Weaver.
Quick Results in Pollenizing Pecans—E. E. Rislen.
Soil Fertility; Fertilizer Problems in Pecan Culture—J. J. Skinner.
Status of Pecan Industry—C. A. Reed, U. S. Nut Culturist.
Top-Working Northern Pecan Trees—J. F. Wilkinson.
\$2,000 an Acre by Top-working Pecan Trees—Stiles.
Why Pecan Trees Bear Alternate Years—C. A. Reed.

PINON NUT—

The Romance of the Pinon Nut Industry in New Mexico

WALNUT (BLACK)—

Black Walnut As a Meat Producer—Henry Stabler.
Improved Black Walnut a Good Investment—Henry Stabler.
The Lewis Hardy Black Walnut—H. R. Mosnat.
The Ubiquitous Black Walnut—T. P. Littlepage.

WALNUT (ENGLISH)—

English Walnut: Where To Plant It.
Franquette Walnut Orchard Pays Well—Turk.
Grafting, Budding, Topworking—Dr. W. C. Deming.
Some Walnut Varieties—Dr. L. D. Batchelor.
Top-Grafting the Walnut Tree—Ferd Groner.
Walnut Trees For New England—Dr. Robert T. Morris.

PROPAGATING—

Chip Buds For Nut Trees—Charles L. Edwards.
Grafting and Budding the Walnut—U. S. Dept. Agriculture.
Nut Tree Grafting by an Easy Method—Dr. Robert T. Morris.
Underworking Nut Trees—Charles L. Edwards.

MISCELLANEOUS—

Advent of Nuts as Staple Food—Dr. J. H. Kellogg.
American Nut Culture—24-page Pamphlet Survey.
American Nut Industry—C. A. Reed, Nut Culturist.
The Future of Nut Growing—Dr. Robert T. Morris.
How To Guard Against Faulty Nuts—Harvey C. Stiles.
List of Nut Trees for Northern Planting—W. G. Bixby.
Nut Trees for Highways and Public Places—W. S. Linton.
Nut Trees to Reduce Food Costs—Chas. Lathrop Pack.
Outline of Northern Nut Culture Activity—Dr. W. C. Deming.
Value of Nuts As Food—Dr. W. C. Deming.
What Nuts to Plant in Northern States.

AMERICAN FRUITS PUBLISHING CO., 39 State Street, Rochester, N. Y.

Big Business In Marketing Pecans

An Address of Highest Importance to Every Pecan Grower, Delivered at Organization Meeting of the Southern Pecan Growers Association in Albany, Georgia, September 7, 1923

By CHARLES J. BRAND, Consulting Specialist, U. S. Dept. Agriculture

THIS Address, replete with practical information and full instructions for procedure to place the rapidly growing Pecan Industry on a sound business basis through systematic co-operative marketing, insuring highest regular permanent returns to the grower, in increasing ratio, will be published in succeeding issues of the

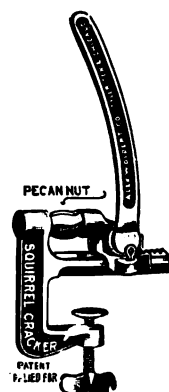
American Nut Journal

Official Journal of the
National Pecan Growers Association

Publication of the Address commenced in the November issue of the Journal and continues in the following issues. This Address should be read and re-read, studied in detail and kept on file by every Pecan Grower. Its author is a high authority on the subject. Under any other than Government auspices the advice in this Address would cost a large amount of money.

If not already a subscriber, send \$2.00 at once for the Official Journal (\$3.25 includes membership in the National Pecan Growers Association). Three years for \$5.00.

American Nut Journal Box 124 Rochester, N. Y.



Squirrel Nutcracker

BEST ON EARTH

Cracks the shell but not the kernel. Very simple; operates faster and better than any hand power nutcracker known.

Alex Woldert Co.,
TYLER, TEX.

BUDDED and GRAFTED Nut Trees

Start right with my hardy Pennsylvania grown trees and be assured of success.

Attractive Catalogue Free. I have this season a fine lot of stake trained Pecan, English Walnut, Black Walnut and Persimmon trees budded on root pruned transplanted stocks, that will please you and that will transplant easily and safely. Write for catalogue.

J. F. JONES, The Nut Specialist
LANCASTER, PA.

SPRAYERS

FOR EVERY NEED

HIGH PRESSURE guaranteed

Ask for the **Ospraymo** Catalogue



Field
Force Pump
Co.

ELMIRA, N. Y.

N. J.—No. 1

PROFITABLE PECAN TREES

By careful methods of bud selection and culture we grow trees that yield Profitable Nut Crops. This fact is proven in our own large orchards and in the orchards of our customers. Our trees make satisfied customers.

We can supply all standard varieties. Make your reservations early to insure delivery when wanted.

Summit Nurseries

Monticello, Florida

PECAN TREES

100,000 TREES—STANDARD VARIETIES
WE GROW NOTHING BUT PECAN TREES
HIGH QUALITY—SERVICE THE BEST
SIMPSON NURSERY CO., MONTICELLO, FL.



NEW EDITION FREE

A practical guide showing how to bud pecans. Tells how to grow trees 12 inches in diameter by the end of the 8th year, which yielded 400 lbs. nuts per acre.

Trees, Nuts, Groves for sale direct without agent at attractive reduced prices
B. W. STONE, Thomasville, Ga.

PECAN TREES

Plant them this year! Buy direct from nursery and save agent's profit. All standard varieties; quality and service the best. Write us for prices.

FLORIDA NURSRIES

W. W. Bassett, Prop., Monticello, Fla.

SUCCESS

and other leading varieties. Also citrus
BECHTEL PECAN NURSERIES

Ocean Springs, Miss.

PECAN TREES

We Grow Them Right
We Pack Them Tight
We Price Them Right

Southern Nut Tree Nurseries
THOMASVILLE, GA.

MONTICELLO NURSERY COMPANY, MONTICELLO, FLA.

One of the oldest nurseries in the Gulf States. Winners of the prize for the best quality pecan in the world, in "The Best Pecan Contest" held at Bend, Texas, in 1921.

All of our pecan trees are budded and grafted with wood cut from bearing orchard trees. Quality and service of the best.

Trifoliata seedlings and all standard varieties of pecan trees.

WRITE for CATALOGUE and PRICES

We are buyers of all varieties of Pecan Nuts.

MONTICELLO NURSERY COMPANY, F. A. Mahan, Mgr.

Manufacturers of all kinds of Barrels, especially for Pecans

PENSACOLA COOPERAGE CO.

PENSACOLA

FLORIDA

Albany Pecan Nut Exchange, Albany, Georgia

Now booking orders all varieties paper shell pecans S. A. P. Mail us list of your requirements to day, for fall delivery.

FOR SALE

5 ACRE PECAN GROVE LOCATED IN THE UNITED PECAN GROVES AT PUTNEY, GEORGIA. TREES PLANTED 9 YEARS AND IN GOOD CONDITION—UNDER CARE OF PAPER SHELL PECAN GROWERS ASSOCIATION.

PRICE, \$2,500—A BARGAIN FOR QUICK SALE. ADDRESS G. E. HADDEN, 6016 HAYES AVE., LOS ANGELES, CALIF.

Budded and Gra

HARDY NORTHERN NUT TREES

Best varieties, grown in natural soil. Send for catalog. Have your seedling nut trees topworked to these fine varieties.

Information and estimate request

INDIANA NUT NURSERY

Rockport, J. F. Wilkinson, Prop., Indiana.

ORCHARD OWNERS OF THE SOUTH-EAST AND GULF STATES

Reports furnished on pecan and fruit orchards, giving variety, age, size and condition of each tree; also notes on general conditions and needs of orchards. Care and management of orchards a specialty.

HORTICULTURISTS INCORPORATED
6th Floor, Exchange Bank Building
Albany, Ga.

American Fruits Company's Library Opportunities

PRACTICAL BOOKS ON HORTICULTURE, NUT GROWING, NURSERY PRACTICE

Any of the following books will be sent on receipt of price by AMERICAN FRUITS PUB'G CO.,

123-125 Ellwanger & Barry Bldg., ROCHESTER, N. Y. Prices subject to change.

American Apple Orchard By F. A. Waugh.....	\$1.90	Land Drainage—Joseph H. Jeffrey..	2.15	Pomology, Text-book of—Gourley...	2.75
American Fruit Culturist By John J. Thomas.....	3.65	Landscape Gardening—Downing's Famous Work—10th Edition— Revised by Waugh.....	6.00	Practical Forestry—A. S. Fuller....	2.15
American Fruit Farm—F. N. Thorpe	2.65	Landscape Gardening—House and Garden's Book of Gardens, 9 1/2 x 12 1/2, 400 Illustrations.....	5.15	Practical Fruit Grower—Maynard...	1.00
American Grape Culture—Munson..	2.65	Landscape Gardening Kemp—Re- vised by F. A. Waugh.....	2.15	Practical Tree Repair—Peets.....	2.65
American Grape Growing and Wine Making—George Husmann	2.15	Landscape Gardening—Maynard	2.65	Principles of Agriculture—Bailey...	2.00
American Horticultural Manual By Budd-Hansen, two vols.	3.30	Landscape Gardening—The Small Place—By Elsa Rehmann.....	3.65	Principles of Fruit Growing—Bailey	2.65
American Peach Orchard—Waugh..	1.90	Landscape Gardening—Cridland.....	2.65	Principles of Pruning—Kains.....	2.65
Bulbs and Tuberous-Rooted Plants..	2.15	Landscape Gardening—The Com- plete Garden—Albert D. Taylor..	6.15	Productive Orchard—F. C. Sears..	2.65
Bush Fruits—By F. W. Card.....	3.15	Landscape Gardening—O. C. Simonds	6.15	Pruning Manual—By L. H. Bailey...	2.65
California Fruits and How to Grow Them—E. J. Wickson, A. M....	4.15	Making Horticulture Pay—Kains....	1.90	Putnam's Garden Hand Book.....	2.00
Citrus Fruits—J. E. Coit.....	3.40	Manual American Grape Growing— Hedrick	3.40	Quince Culture—W. W. Meech.....	1.35
Commercial Apple Industry of North America	3.65	Manual of Fruit Diseases—L. R. Hessler, H. H. Whetzel.....	3.15	Raspberry, Blackberry Culture—Lit- tocy40
Cyclopedia of Hardy Fruits By U. P. Hedrick	6.20	Manual of Fruit Insects—M. V. Slingerland, C. R. Crosby.....	3.90	Rose—H. B. Ellwanger.....	1.40
Dwarf Fruit Trees—Waugh.....	1.00	Manual of Gardening—L. H. Bailey..	3.40	Rose in America—McFarland.....	3.15
Evergreens, Cultivated—Bailey	7.75	Manual Tropical and Sub-tropical Fruits—Popenoe	3.90	Sales Promotion By Mail.....	2.15
Farm Bureau Movement—O. M. Kile	2.15	Manual of Tree Diseases—Rankin... 3.40		Small Fruit Culturist—A. S. Fuller..	1.75
Fertilizers and Crops By Dr. L. L. Van Slyke.....	3.40	Manual of Vegetable Garden Insects By Crosby & Leonard.....	2.90	Soils—E. W. Hilgard.....	4.25
Fertilizers—Edward B. Voorhees... 2.65		Manures and Fertilizers—Wheeler..	2.65	Soils—Lyon-Fippin-Buckman	3.40
Field Notes on Apple Culture By Dr. L. H. Bailey.....	.90	Modern Fruit Marketing—Brown....	1.90	Soils—F. H. King.....	2.40
First Principles of Soil Fertility By Alfred Vivian.....	1.50	Modern Propagation Tree Fruits— B. S. Brown.....	1.65	Soils—By Charles W. Burkett.....	1.90
Forests of N. Y. State—Recknagel..	2.65	Nature's Garden—Neltje Blanchan..	6.30	Spraying Crops—C. M. Weed.....	1.00
Fruit Growing in Arid Regions....	2.75	Natural Style Landscaping—Waugh	2.65	Spraying Manual—Cockerham.....	1.35
Fruit Garden—P. Barry.....	2.40	Nursery Manual—Dr. L. H. Bailey...	2.65	Standard Cyclopedia of Horticulture Edited by L. H. Bailey. In six vol- umes. 3,600 pages. 4,000 text engravings. 96 sepia halftones. 500 collaborators. May be had on installment payments.....	40.00
Fruit Harvesting, Marketing—Waugh	1.90	Nut Culturist—Andrew S. Fuller....	2.15	Standardized Plant Names—Cata- logue—Cloth, \$5.00; Thin Paper Flexible	6.50
Fruit Insects—Crosby.....	3.90	Nut Growing: Latest Information; Guide to Propagating—By Rob- ert T. Morris.....	2.65	Strawberry in North America—S. W. Fletcher	1.90
Fumigation Methods	1.90	Old Time Gardens—Alice M. Earle..	2.65	Strawberry Growing—S. W. Fletcher	2.40
Gardening for Pleasure—Henderson..	2.15	Ornamental Gardening—E. A. Long..	2.15	Success in the Suburbs—John R. Mc- Mahon	2.15
Gardening for Profit—Henderson....	2.15	Principles of Floriculture.....	3.40	Successful Fruit Culture—Maynard	1.75
Grape Growers Guide—Chorlton....	1.65	Parsons on the Rose—Parsons.....	1.75	Systematic Pomology—Waugh.....	1.90
Greenhouse Construction—Taft.....	2.40	Peach Culture—J. A. Fulton.....	1.65	Ten Acres Enough—I. P. Roberts... 1.75	
Greenhouse Management—Taft.....	2.40	Peach Growing—By H. P. Gould....	2.65	Weather Proverbs, Paradoxes— Humphreys	1.50
Hedges, Windbreaks, Shelters.....	1.00	Pear Culture for Profit—Quinn....	1.35	Wild Fruits, How to Know—Peterson	2.15
Roses—How to Grow—Robert Pyle..	1.50	Picturesque Gardens—Henderson....	2.25	Wind and Weather—McAdie.....	1.40
Injurious Insects—F. L. Washburn..	2.65	Plant Breeding—By Dr. L. H. Bailey	3.40		
Insects of Importance—Herrick....	2.15	Plant Propagation; Greenhouse and Nursery Practice—M. G. Kains... 2.40			
Insect Book—Dr. L. O. Howard.....	6.30	Plant Physiology—B. M. Duggar....	3.90		
Insects and Insecticides—Weed....	2.15				
Insect Pests of Farm, Orchard and Garden—Sanderson and Peairs..	4.65				
Insecticides and Fungicides.....	3.20				
Irrigation Farming—L. M. Wilcox... 2.40					
Irrigation for the Orchard—Stewart	1.75				

A paper which gives the best value for the money to the reader will give the best value to the advertiser as well. I don't think there is any argument about the soundness of this view.—H. Dumont, Chicalo, Ill., in Printer's Ink.

WANTED Names and Addresses of Owners of Groves of Native Nut Trees in Northern States.

In the interest of Northern Nut Culture this Journal desires the above information to serve as a basis for extension of Nut Culture.

Readers will confer a favor by sending us lists of names and addresses of those who have stands of nut trees on their property, (with some account of productivity if practicable). Black walnut, English walnut, butternut, hickory, chestnut, filbert, etc.

American Nut Journal P.O. Box 124 **Rochester, N. Y.**

If it relates to nut culture it should be in AMERICAN NUT JOURNAL. Please send it in.

AMERICAN NUT JOURNAL, the Official Journal, three years for \$5.00; twelve months, \$2.00; single copy 20c.

A NEW BOOK! NUT GROWING

By Robert T. Morris

The latest and only up to date book on the newest and one of the most important branches of Horticulture, giving a broad survey of a rapidly growing industry. Detailed explanation of successful methods of propagation and the new process of grafting with the use of paraffin; illustrated.

An invaluable work for all nut growers.

Price \$2.65, Postpaid

AMERICAN FRUITS PUB'G. CO.
39 State St., BOX 124, Rochester, N. Y.

The Logical Market Place for Sale of Nuts

The Advertising Columns of the American Nut Journal Chief Exponent of the Trade.

Hundreds of Readers of this Journal Ask for Pecan Nuts in Moderate Quantity at Prices Less Than the Retail Price per Pound in Northern Markets. They Would Be Eager Buyers if They Knew Where to Apply. If There is Any Surplus at Any Time, the Advertising Columns of this

Journal Will Dispose of It. Rate, \$2.80 per Inch. Announcement Should be Maintained the Year Around (Yearly Rate, less than 60 Cents per Inch a Week) to Secure Best Results. Make Your Name a Household Word Wherever Pecans Are Wanted. Make It Easy To Procure Them.

AMERICAN NUT JOURNAL

P. O. Box 124

ROCHESTER, N. Y.

